Tri-Party Agreement
Manager Milestone Review Meeting
October 28, 2008

Office of River Protection

U.S. Department of Energy
U.S. Environmental Protection Agency
Washington State Department of Ecology

September 2008

Agenda

Office of River Protection
Tri-Party Agreement
Manager Milestone Review Meeting
2440 Stevens Center, Conference Room 1200
October 28, 2008
9:00 a.m. – 11:30 a.m.

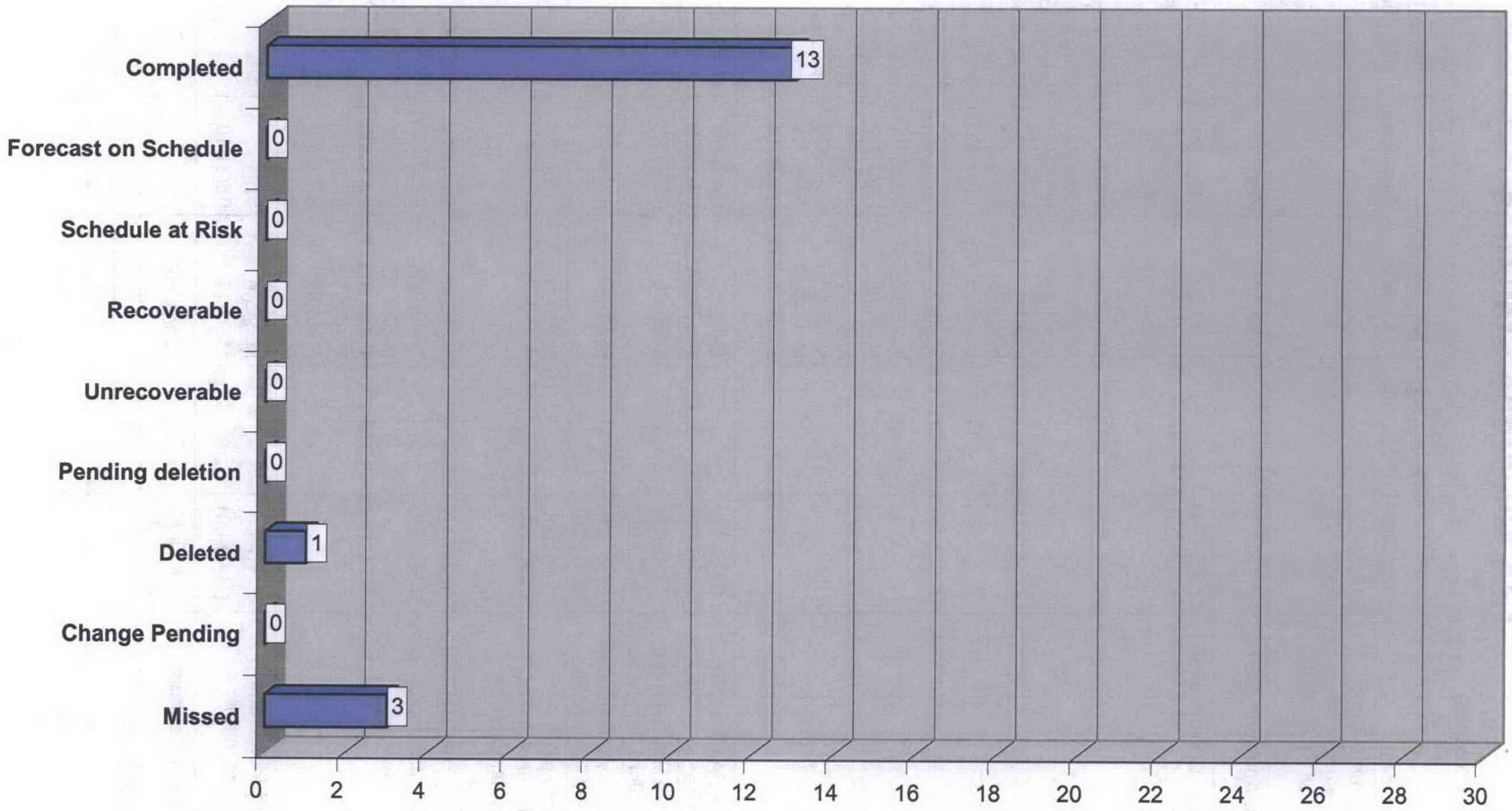
Page	Topic	Leads	Time
3	TPA Milestone Statistics	Woody Russell Suzanne Dahl /Jeff Lyon	9:00
50	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober /Joe Caggiano	9:05
52	M-45-00, Complete Closure of All Single-Shell Tank Farms	Chris Kemp /Jeff Lyon	9:15
62	Interim Stabilization Consent Decree	John Long /Nancy Uziemblo	9:30
63	In Tank Characterization and Summary	John Long /Michael Barnes	9:35
64	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Ben Harp /Les Fort	9:40
66	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/Disposal of ILAW and M-20, Part B Permits	Ben Harp /Bud Derrick	9:45
67	M-62-08, M-62-11 Bulk Vitrification/ Supplemental Technologies	Ben Harp /Ed Fredenburg	9:50
	BREAK		
21	FY 2007 ORP TPA Cost & Schedule Performance (CHG)	Janet Diediker Ed Fredenburg /Jeff Lyon	10:00
69	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	Bruce Nicoll /Pete Furlong /Wahed Abdul /Gary Olsen/Howard Budweg / Ed Fredenburg	10:05

TPA Milestone Statistics

(Including target milestones)

Milestone	Due Date	Total Active as of 02/21/08	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-45-00, Complete Closure of all SST Farms	09/30/24 (M-45-00)	35	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-02P M-45-05-T10 M-45-05-T11 M-45-02Q M-45-05-T12	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 03/01/12 09/30/12 09/30/13 03/01/14 09/30/14	M-45-05-T13 M-45-02R M-45-05-T14 M-45-05-T15 M45-02S M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-56 M-45-58 M-45-59 M-45-60 M-45-61 M-45-62	09/30/15 03/01/16 09/30/16 09/30/17 03/01/18 09/30/24 03/31/12 03/31/14 06/30/11 06/30/11 TBD 12/31/08 TBD 12/31/08 12/31/10 07/31/12
M-47-00, Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	3	M-47-00 M-47-03A	02/28/18 03/31/09	M-47-06	06/30/10
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	14	M-62-00 M-62-00A M-62-07B M-62-01Q M-62-01R M-62-01S M-62-01T	12/31/28 02/28/18 12/31/07 07/31/08 01/31/09 07/31/09 01/31/10	M-62-08 M-62-09 M-62-01U M-62-01V M-62-10 M-62-01W M-62-11	06/30/06 02/28/09 07/31/10 01/31/11 01/31/11 07/31/11 06/30/07
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	2	M-90-00 M-90-11	TBD 08/31/10		
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
Total Active Milestones:		**59**				

FY 2006 MILESTONE PERFORMANCE



Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R26	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/05	10/31/05								
M-048-07A-A	Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service by October 31, 2005. This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-A.	10/31/05	10/31/05								
M-046-21	Complete Implementation Of Double Shell Tank Space Optimization Study Recommendations (Tank Space Options Report Document No. RPP-7702, April 12, 2001).	12/31/05	12/15/05								
M-062-01L	Submit Semi-Annual Project Compliance Report.	01/31/06	01/31/06								
M-045-02M	Submit biennial update to SST retrieval sequence document (agreement Appendix I. Section 2.1.2), double-shell tank space evaluation document and Ecology concurrence of additional tank acquisition.	3/1/06	3/13/06								

Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A-B	Completion of construction for the 241-AP-106A central pump pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-B.	3/31/06	3/30/06								
M-048-14	Submit Written Integrity Report For The Double-Shell Tank System.	3/31/06	3/31/06								
M-047-05A	Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 or AZ-102).	4/30/06	02/2/05								
M-45-55-T04	Submit to Ecology for review and comment a draft Field Investigation Report combining the results of field investigations and analysis for WMAs A-AX, C and U. As part of the Phase 2 Vadose Zone project renegotiations, being developed, this target milestone scope has be included in M-45-55 Phase 1 rollup documentation due in 1/08.	4/30/06								X	

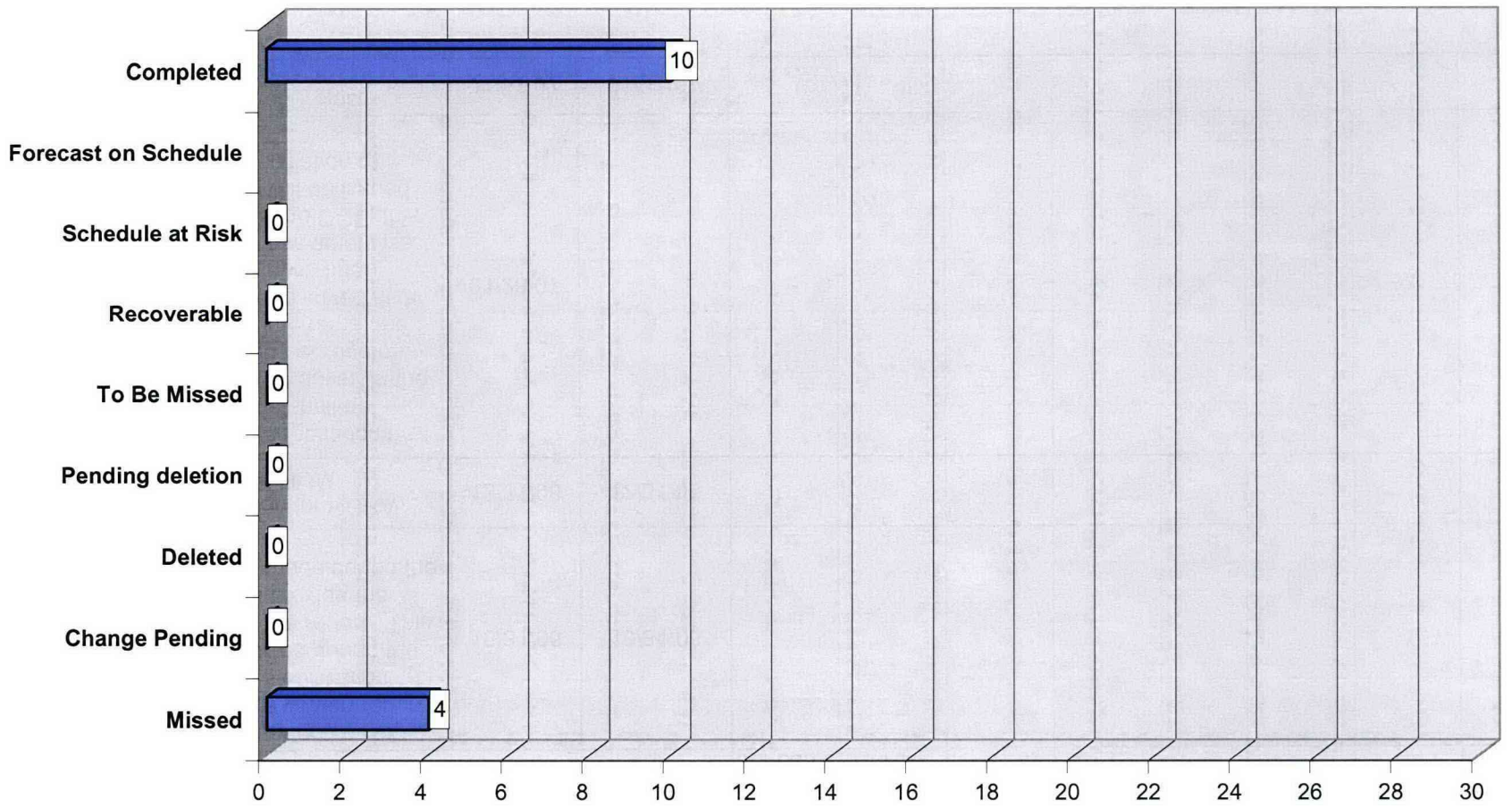
Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-048-07A	Complete construction of the AZ-301 condensate return system and pit upgrades. This includes: 1) Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service [see M 45-07A-A]; 2) Complete construction of AP-106A Central Pump upgrade [M-48-07A-B]; and 3) complete construction of SY-B Valve Pit upgrade [see M 48-07A-C].	06/30/06	06/28/06								
M-048-07A-C	Completion of construction for the 241-SY-B valve pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-C.	06/30/06	06/08/06								
M-048-07B	The Disposition of all Double-Shell Tank Transfer System Components that will not remain in use beyond June 30, 2005.	06/30/06	6/27/06								
M-062-08	Submittal Of Hanford Tank Waste Supplemental Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline, And Draft Negotiations Agreement In Principle (AIP).	06/3/06						X			

Fiscal Year 2006 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56B	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/06	09/05/06								
M-062-01M	Submit Semi-Annual Project Compliance Report.	07/31/06	07/31/06								
M-045-00B	Complete specified "near term" SST waste retrieval and interim closure activities, to result in the retrieval of all tank wastes in WMA-C SSTs pursuant to the agreement criteria in milestone M-45-00.	09/30/06						X			
M-045-00C	Initiate negotiation of SST waste retrieval and closure activities and associated schedules (for the period February 07 through August 08).	09/30/06						X			

FY 2007 MILESTONE PERFORMANCE



Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R30	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/06	10/31/06								
M-062-03	Submit DOE Petition for RCRA Delisting of Vitrified HLW.	12/31/06	12/31/06								
M-045-00C-A	Ecology and DOE negotiations under this milestone shall be completed within 120 days. In the event the parties do not reach agreement within timeframe, the negotiations will be resolved as a resolution of dispute via final determination. Unless otherwise agreed by Ecology and DOE, this final determination will be issued within 150 days of initiation of negotiations.	01/28/07						X			
M-062-01N	Submit Semi-Annual Project Compliance Report.	01/31/07	01/31/07								

Fiscal Year 2007 Tri-Party Agreement Milestone Status

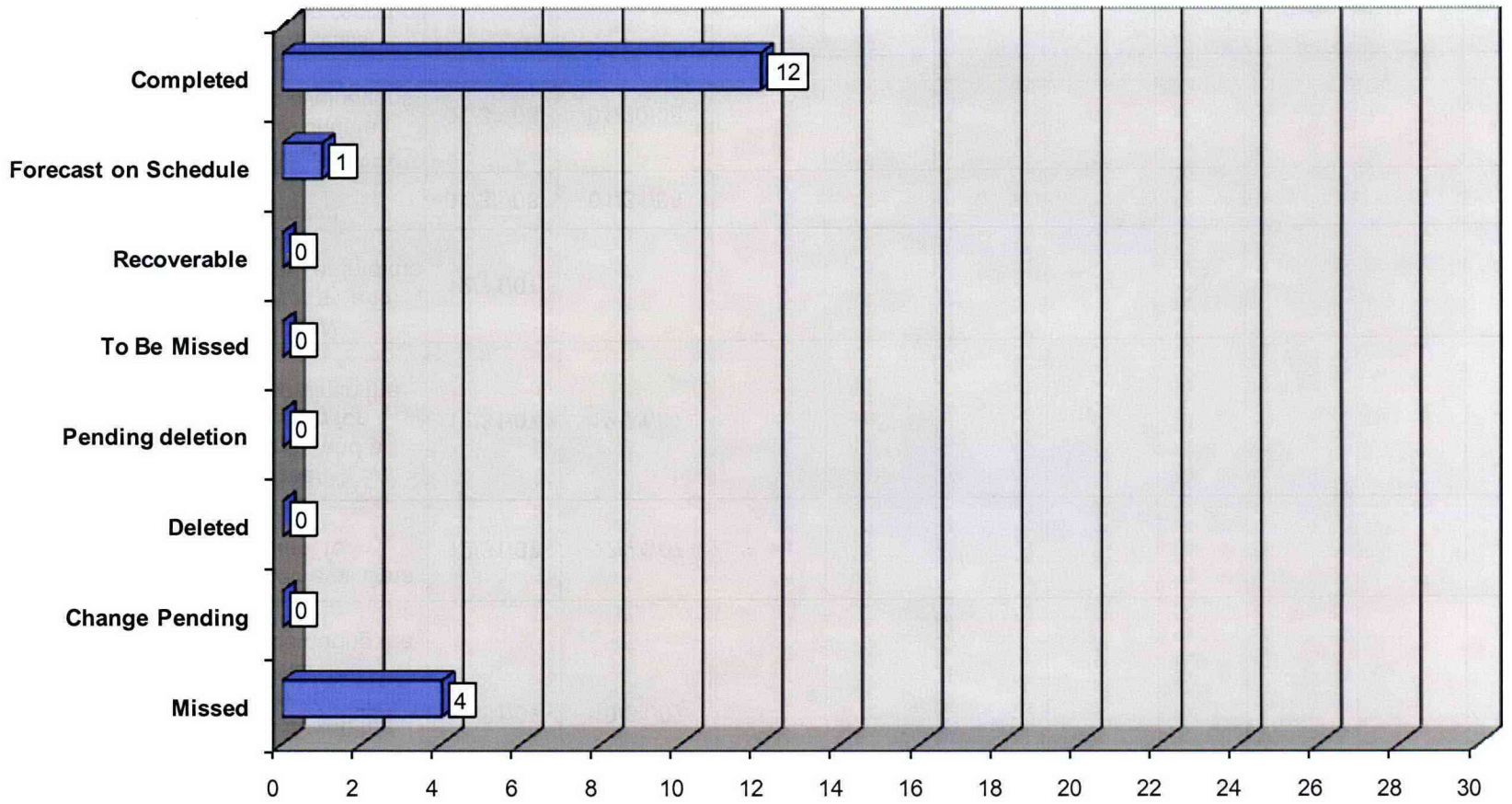
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R31	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/07	01/31/07								
M-045-05A	Complete Waste Retrieval from S-102.	3/31/07						X			
D-001-00-R32	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/07	04/27/07								
M-062-11	Submit a Final Hanford Tank Waste Treatment Baseline. Following completion of negotiations required by M-62-08, DOE will modify its draft baseline as required and submit its revised, agreed-to baseline for treating all Hanford Tank Waste (HLW, LAW, and TRU) by 12/31/2028.	06/30/07						X			

Fiscal Year 2007 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-56C	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/07	07/31/07								
D-001-00-R33	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/07	07/30/07								
M-062-01O	Submit Semi-Annual Project Compliance Report.	07/31/07	07/31/07								
M-048-15	Submit a report to Ecology for the re-examination of six (6) DSTs by ultrasonic testing in all areas previously examined to provide comparative data from which to calculate corrosion rates in each of the six DSTs examined.	09/30/07	09/27/07								
M-045-05-T05	Initiate tank retrieval from five additional single-shell tanks.	09/30/07						X			
M-048-00	Complete Tank Integrity Assessment activities for Hanford's Double Shell Tank (DST) system.	09/30/07	09/27/07								

*** Milestone has been completed by ORP; Ecology has not yet concurred.**

FY 2008 MILESTONE PERFORMANCE



Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R34	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/07	10/31/07								
M-045-13-A	Submit to Ecology a Retrieval Data Report for S-112 pursuant to Agreement Appendix I.	12/31/07	12/21/07								
M-045-13-B	Remaining waste has been adequately characterized, and a risk assessment completed for S-112 residuals that remain in the tank.	12/31/07	12/21/07								
M-062-07B	Complete Assembly of LAW Vitrification Facility melter #1 and complete move of #1 melter into the HLW Vitrification Facility	12/31/07						X			
M-062-01P	Submit Semi-Annual Project Compliance Report.	01/31/08	01/31/08								
M-045-55	Submit to Ecology a Phase 1 RFI report integrating results of data gathering activities and evaluations for all SST WMAs.	01/31/08	01/30/08								
D-001-00-R35	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/08	01/31/08								

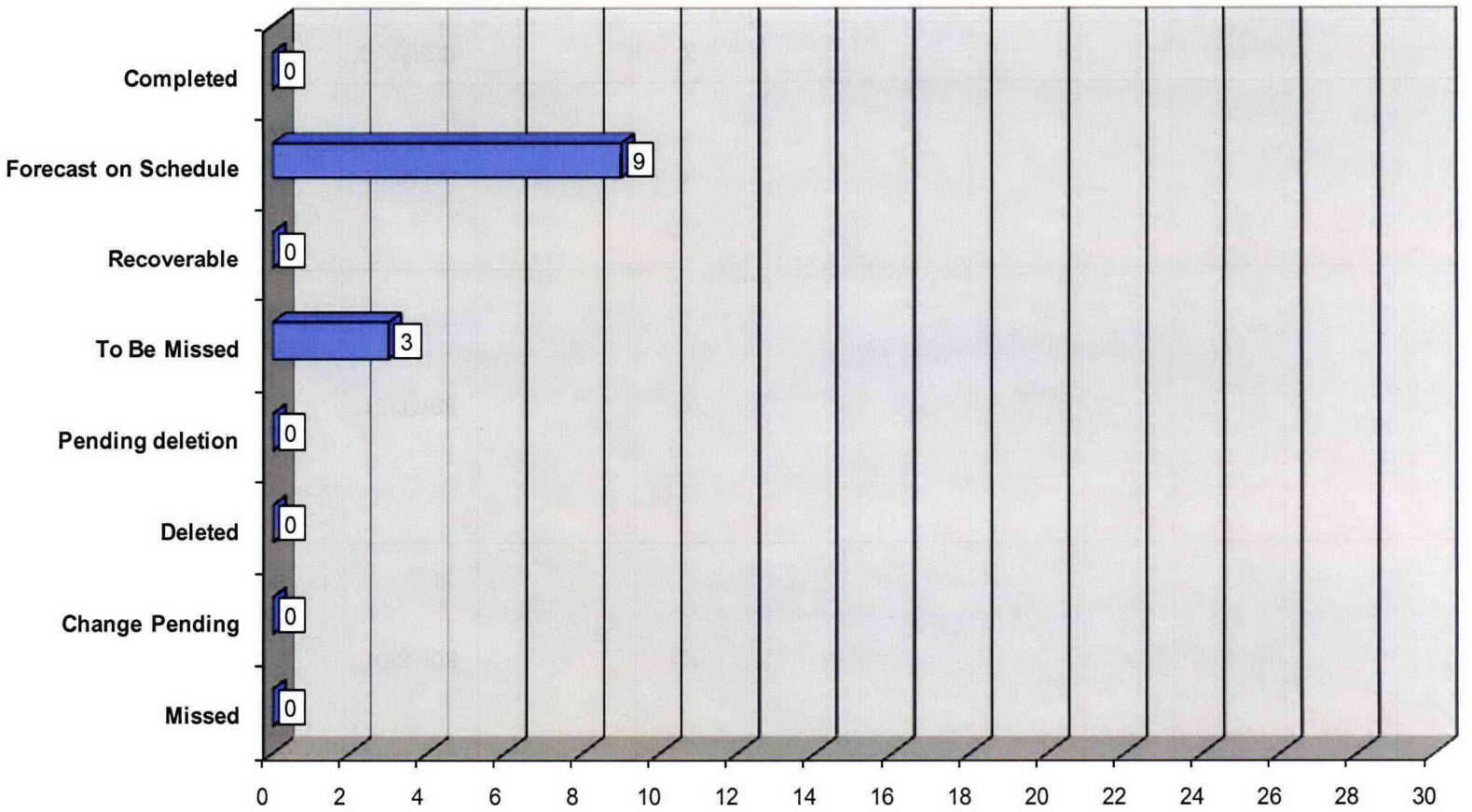
Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-045-00D	Initiate negotiations of SST waste retrieval and closure for 2008-2013.	01/31/08						X			
M-045-02N	Submit Biennial Update.	03/01/08	02/29/08								
M-045-02N-A	Three Parties shall meet to establish new milestones within 60 days, if required, for acquisition of additional tanks.	06/02/08		X							
D-001-00-R36	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/08	04/30/08								
M-045-00D-A	Negotiations shall be complete within 150 days.	06/29/08						X			
M-045-56D	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/08	07/22/08								
D-001-00-R37	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/08	07/31/08								

Fiscal Year 2008 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
M-062-01Q	Submit Semi-Annual Project Compliance Report.	07/31/08	07/30/08								
M-090-10	Ready to accept placement of ILAW in ILAW Disposal Facility.	08/31/08	02/13/07								
M-45-05-T06	Initiate tank retrieval from five additional SSTs.	09/30/08						X			

FY 2009 MILESTONE PERFORMANCE



Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R38	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	10/31/08		X							
M-045-58	Submit to Ecology for Review and Approval as an Agreement Primary Document Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet final closure requirements in the Waste Management Areas as described in Appendix I, Section 2.3	12/31/08		X							
M-045-60	Submit to Ecology for review and approval as an agreement primary document, DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.	12/31/08		X							
M-062-01R	Submit Semi-Annual Project Compliance Report	01/31/09		X							

Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R39	DOE shall, on a quarterly basis, submit to Ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	01/31/09		X							
M-062-09	Start Cold Commissioning – Waste Treatment Plant	02/28/09					X				
M-47-03A	Complete startup/turnover for waste retrieval mobilization systems for selected initial tank high-level waste feed tank	03/31/09					X				
D-001-00-R40	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	04/30/09		X							
M-045-56E	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/31/09		X							

Fiscal Year 2009 Tri-Party Agreement Milestone Status

Milestone No.	Description	Due Date	Completed	Forecast		Recover able	Will Be Missed	Missed	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk						
D-001-00-R41	DOE shall, on a quarterly basis, submit to ecology a written report documenting tank stabilization activities that occurred during the period covered by the report. This written report shall provide the status of progress made during the reporting period.	07/31/09		X							
M-062-01S	Submit Semi-Annual Project Compliance Report	07/31/09		X							
M-045-05-T07	Initiate tank retrieval from 7 additional SSTs	09/30/09					X				

EXECUTIVE SUMMARY ON

TANK FARMS EARNED VALUE REPORTING

In August, there was a favorable schedule variance (SV) of $2.1M with a schedule performance index (SPI) of 1.09) and a favorable cost variance (CV) of $4.9M with a cost performance index (CPI) of 1.25. The overall contract-to-date (CTD) cost and schedule performance remains outstanding. The CTD SV is a favorable $66.2M (SPI of 1.08) and a CV of $58.2M (CPI of 1.07).

Schedule Variance Analysis

The CM favorable SV of $2.1M is due to 1) significant progress earned on accelerated work for Tank C-110 Retrieval (design/engineering, procurement, system installation construction, and startup and readiness); 2) accelerated work performed on the Project W-314 AW Upgrades (HVAC exhausters); 3) progress earned on the Hose-in-Hose Transfer Line (HIHTL) Disposition Project (work completed in August 2008 on the last four lines including removal of lines from S-101, S-A Pit, and S-C Pit); and 4) acceleration of two Evaporator campaign activities.

The favorable CM SV is partially offset by unfavorable variances related to 1) Evaporator Upgrades (budget in the current month for work performed early on the 242-A Evaporator HVAC and monitoring control system [MCS] Upgrades); and 2) C-109 Hard Heel Retrieval (budget in the current month for work completed early).

The CTD positive SV of $66.2M is due to 1) accelerated work on C-104 and C-110 retrievals, C Farm Infrastructure, and work completed ahead of schedule for C-108 and C-109 retrievals; 2) accelerated work on Demonstration Bulk Vitrification System (DBVS) Technology Development and Design to address External Review Panel (ERP) issues including the Integrated Dryer and Melt Test (IDMT); 3) accelerated work on the Tank S-102 Retrieval; 4) W-314 Project accelerated work on completion and turnover of AN, AP, AW, and SY Farms electrical and ventilation exhauster upgrades, and the Master Pump Shutdown (MPS)/MCS; 5) accelerated work on cross-site transfers, the SY Farm prefabricated pump pit (PPP) line replacement, and double-shell tank-to double-shell tank (DST-to-DST) Transfers; 6) accelerated work on the AY/AZ Farm Upgrades (AZ-102 pump replacement and installation); and 7) Direct Push sampling and Surface Geophysical Exploration (SGE) work ahead of schedule.

These favorable CTD SVs are partially offset by minor unfavorable variances for 1) delay in S-302 pumping due to required alternate pump replacement and HIHTL Disposition Project (engineering design and work packages were delayed due to availability of engineering and craft support for field work); 2) delay in buoyant displacement gas release event (BDGRE); work not needed due to delay in Tank C-110 Retrieval); and 3) Single-Shell Tank (SST) Integrity Project (Expert Panel Oversight Committee activities planned for this year are deferred to next year).

Cost Variance Analysis

The CM CV of $4.9M is driven by: 1) cost accrual reversal for sales tax related to Lockheed Martin Services, Inc. (LMSI) and cost efficiencies in Information Resource Management (IRM) (Program/Requirements Management and desktop support); 2) less labor than planned for SST Operations Essential Services, which is partially offset by SST and DST Technical Safety Requirement (TSR)/Basic Maintenance labor assigned to the SST preventative maintenance (PM)/corrective maintenance (CM) backlog reduction; 3) less than planned labor and crane and rigging support and labor costs less for Tank Waste Sampling; resources assigned to support higher priority work; 4) less than planned costs for Shared Services and Miscellaneous Services and labor liquidations (work for others higher than planned); 5) cost savings in IPS Project (Support, Safety Analysis, and Technology Development) and labor efficiencies in Strategic Planning (integration, management, and technology development completed under budget); and 6) costs less than planned for Advanced Technologies and Laboratories International, Inc. (ATL) Readiness to Serve;

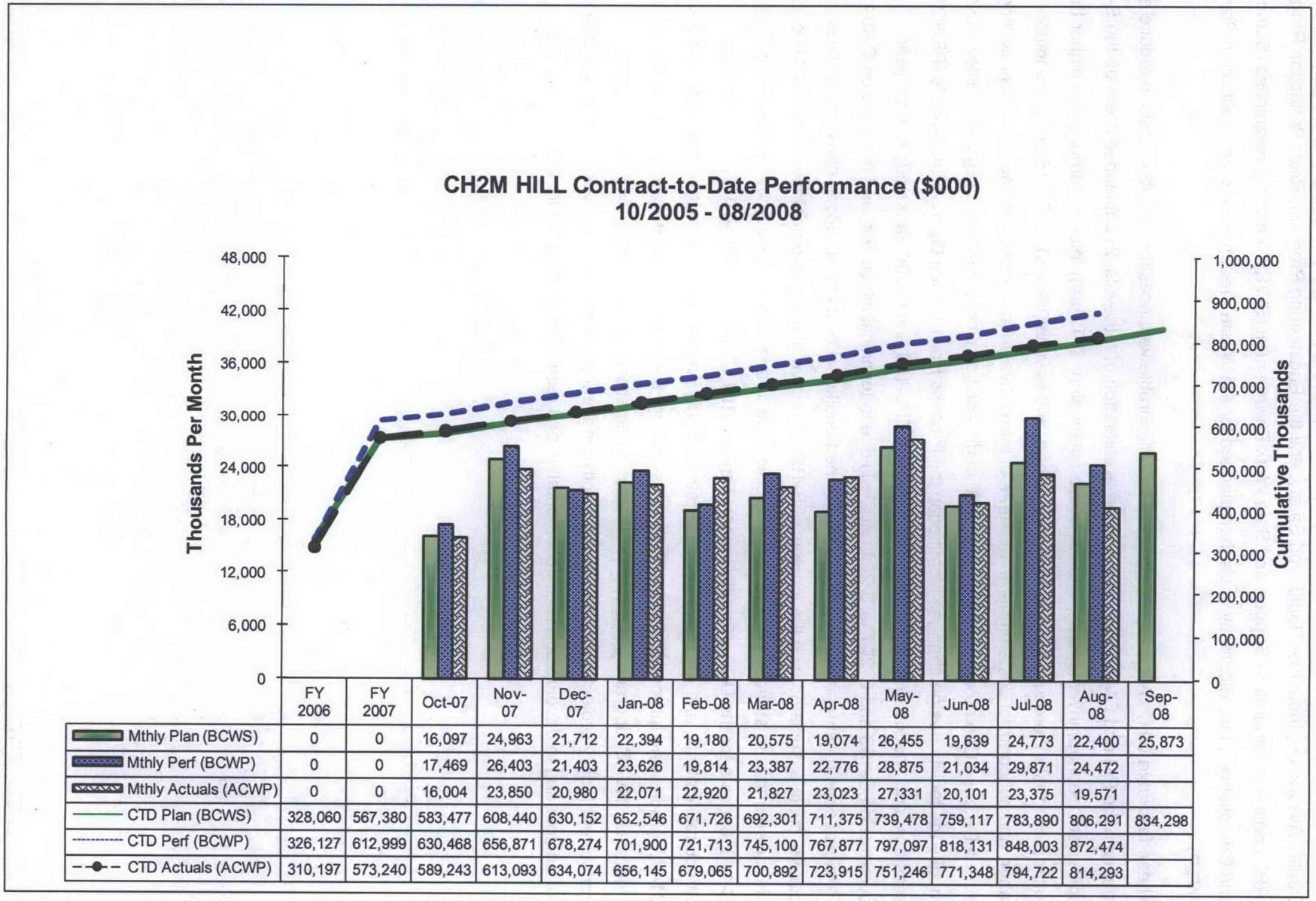
The current month favorable CVs are partially offset by unfavorable variances for: 1) Tank C-110 Retrieval (overtime to complete the installation), C-104 costs for shutdown and placement of work to place in a safe standby; 2) 242-A HVAC Upgrade costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and corrective/maintenance activities; MCS Upgrade costs for engineering to develop software documentation, resolution of relay failure issue and rework of heater and control cabinet design and installations, and costs to complete the DST Valve Assembly Upgrades; 3) 242-A Evaporator Operation and Maintenance (regular and overtime labor, materials, and subcontract support associated with emergent work activities, painting of the condenser room and re-rating of the 242-A feed line); 4) unplanned costs related to the Tank S-102 leak event cleanup; and 5) Miscellaneous other unfavorable cost variances related to Project W-314 Phase 2 Startup, Testing, and Turnover of AN and AW Farm HVAC exhausters (troubleshooting and repair of test deficiencies during the operational acceptance testing [OAT] and software upgrades).

The CTD CV of $58.2M is due to variances for: 1) efficiencies on preparation and retrieval work for C-100 Tank Retrievals (Tanks C-109, C-108, and C-110); 2) efficiencies on S Farm Retrievals (Tank S-102 and S-112); 3) cost savings and efficiencies related to Tank Farms Project and program management, Essential Services (IRM, Executive Management, Legal Counsel, Work Force Realignment and Restructure, Manage Facilities and Property Services, Liquidations, Shared Services, Miscellaneous Services and Site-Wide Services); 4) DST-to-DST Transfers and Cross-Site Transfers; AY/AZ Upgrade Projects (use of spare pump for AZ-102 replacement instead of new procurement); 5) 222-S Laboratory underruns in Base Services due to less than planned dedicated and matrixed staff for Maintenance, Production Control, and Technology Development, planned labor rates greater than actual costs, and revised waste volume projections for 222-S base services less than originally planned, and less Tank Sampling due to planning labor rates being greater than actual costs (underrun on core sampling and overrun on grab sampling; these efficiencies have been offset by greater than planned ATL analytical

costs; and 6) Labor efficiencies and cost savings in other support functions including Safety, Health, and Quality Assurance, Industrial Health and Safety, and the Engineering Program; River Protection Program (RPP) Baseline Integration Support and Safe Work Environment (SWE)/Personnel Readiness (Standards and Compliance); less electricity costs than planned for the Waste Treatment and Immobilization Plant (WTP).

These favorable CTD CVs are partially offset by unfavorable variances for: 1) labor costs to reduce and maintain the PM and CM backlog and support acceleration of retrievals; 2) unplanned costs on the S-102 spill event cleanup, investigation, and corrective action plan; 3) T Farm Interim Barrier costs higher than estimates (design, procurement, construction scope, and weather issues); 4) DBVS design, engineering, labor, and subcontract costs higher than planned, retroactive subcontractor rate adjustments resulting from a Defense Contract Audit Agency (DCAA) audit, additional costs for final design and review costs to modify the facility design changes identified in the Process Hazards and Operability Analysis (PRHOA) sessions, and cost overruns on DBVS Procurement; 5) C-100 and C-200 Tanks due to prior year overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties, and overruns on C-104 Retrieval construction and procurement (unplanned additional costs for a second construction crew, delays, costs associated with the impacts of S-102 corrective action implementation, and C-104 costs for shutdown and safe standby work once the decision was made to focus resources on retrieval of Tank C-110; 6) costs for the DST Integrity Project (Tank AY-101 Ultrasonic Testing [UT]), DST System Structural Analysis, and AP Valve Pit/Evaporator Integrity Assessment higher than planned; 7) Project W-314 Upgrades and turnover (troubleshooting, as-builting, and emergent work); and 8) 242-A Evaporator Upgrades (HVAC Upgrade costs due to complexity, emergent work, accelerated schedule, and concurrent facility project upgrades, and corrective/maintenance activities, as well as MCS Upgrade costs for engineering to develop software documentation and resolution of relay failure issue).

CURRENT MONTH/CONTRACT-TO-DATE PERFORMANCE – GRAPH



	FY 2006	FY 2007	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	0	0	16,097	24,963	21,712	22,394	19,180	20,575	19,074	26,455	19,639	24,773	22,400	25,873
Mthly Perf (BCWP)	0	0	17,469	26,403	21,403	23,626	19,814	23,387	22,776	28,875	21,034	29,871	24,472	
Mthly Actuals (ACWP)	0	0	16,004	23,850	20,980	22,071	22,920	21,827	23,023	27,331	20,101	23,375	19,571	
CTD Plan (BCWS)	328,060	567,380	583,477	608,440	630,152	652,546	671,726	692,301	711,375	739,478	759,117	783,890	806,291	834,298
CTD Perf (BCWP)	326,127	612,999	630,468	656,871	678,274	701,900	721,713	745,100	767,877	797,097	818,131	848,003	872,474	
CTD Actuals (ACWP)	310,197	573,240	589,243	613,093	634,074	656,145	679,065	700,892	723,915	751,246	771,348	794,722	814,293	

CURRENT MONTH PERFORMANCE CHART

CH2M HILL Hanford Group, Inc.
CURRENT MONTH PERFORMANCE MEASUREMENT - 08/2008
BY WORK BREAKDOWN STRUCTURE
Dollars in Thousands

		Current Month						
		Budgeted Cost			Variance			
WBS	TITLE	Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %
5.7	**BASE OPERATIONS - Excluding 5.07.02**	12,031.4	11,277.1	8,152.9	-754.3	-6.3%	3,124.2	27.7%
5.07.02	Env/TPA Milestone Achievement	1,017.2	1,157.9	1,347.5	140.7	13.8%	-189.6	-16.4%
	TOTAL BASE OPERATIONS	13,048.6	12,435.0	9,500.4	-613.6	-4.7%	2,934.6	23.6%
5.8	**RETRIEVE AND CLOSE - Excluding foll. WBS Elements**	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.08.02	WTP Feed Delivery Program	585.6	585.4	313.4	-0.2	0.0%	272.0	46.5%
5.08.03	DST Retrieval Program	0.0	0.0	1.0	0.0	0.0%	-1.0	0.0%
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	0.0	325.3	333.2	325.3	325.3%	-7.9	-2.4%
5.08.04.02	Upgrade Transfer System (E-525)	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.08.05	Retrieval / Closure Program	4,896.1	5,224.4	4,065.9	328.3	6.7%	1,158.5	22.2%
5.08.06/.07	SST Retrieval East / West Area	600.7	2,230.1	3,138.0	1,629.4	271.3%	-907.9	-40.7%
5.08.12/.13	SST Closure	106.6	199.4	14.0	92.8	87.1%	185.4	93.0%
	TOTAL RETRIEVE AND CLOSE	6,189.0	8,564.6	7,865.5	2,375.6	38.4%	699.1	8.2%
5.9	**TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements**	947.1	1,266.8	372.6	319.7	33.8%	894.2	70.6%
5.09.02.02	TRU / LLW Packaging	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.09.02.03/.08	LAW Treatment	57.4	57.4	39.1	0.0	0.0%	18.3	31.9%
5.09.02.05/.11	Bulk Vitrification System (BVS) Project	12.2	12.2	13.6	0.0	0.0%	-1.4	-11.5%
5.09.03.01	Integrated Disposal Facility	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
5.09.03.04	Initial IHLW Storage Facility (W-464)	0.0	0.0	0.0	0.0	0.0%	0.0	0.0%
	TOTAL TREAT AND DISPOSE WASTE	1,016.7	1,336.4	425.3	319.7	31.4%	911.1	68.2%
5.10	**ANALYTICAL/TECHNICAL SERVICES**	2,145.9	2,135.1	1,779.9	-10.8	-0.5%	355.2	16.6%
TFC TOTAL		**22,400.2**	**24,471.1**	**19,571.1**	**2,070.9**	**9.2%**	**4,900.0**	**20.0%**

CONTRACT-TO-DATE PERFORMANCE - CHART

CH2M HILL Hanford Group, Inc.

CONTRACT-TO-DATE PERFORMANCE MEASUREMENT - 10/2005 - 08/2008

BY WORK BREAKDOWN STRUCTURE

Dollars in Thousands

		Cumulative Contract-To-Date									
		Budgeted Cost		Actual Cost	Variance				Budget at		Estimate at
WBS	TITLE	Work Scheduled	Work Performed	Work Performed	Schedule	SV %	Cost	CV %	Completion (BAC)*	Accelerated Scope**	Completion (EAC)***
5.07	**BASE OPERATIONS - Excluding 5.07.02**	401,409.8	402,671.9	364,246.9	1,262.1	0.3%	38,425.0	9.5%	416,328.4	2,952.8	378,510.3
5.07.02	Env/TPA Milestone Achievement	49,404.6	53,317.4	51,673.3	3,912.8	7.9%	1,644.1	3.1%	50,727.1	5,776.9	53,206.8
	TOTAL BASE OPERATIONS	450,814.4	455,989.3	415,920.2	5,174.9	1.1%	40,069.1	8.8%	467,055.5	8,729.7	431,717.1
5.8	**RETRIEVE AND CLOSE - Excluding foll. WBS Elements**	0.0	298.2	217.0	298.2	298.2%	81.2	27.2%	0.0	298.1	217.1
5.08.02	WTP Feed Delivery Program	21,258.5	21,258.4	17,985.8	-0.1	0.0%	3,272.6	15.4%	22,019.8	0.0	18,426.3
5.08.03	DST Retrieval Program	1,676.3	1,984.2	2,270.8	307.9	18.4%	-286.6	-14.4%	1,676.3	307.9	2,287.2
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,865.8	8,744.1	10,938.3	5,878.3	205.1%	-2,194.2	-25.1%	2,865.8	5,916.9	11,094.2
5.08.04.02	Upgrade Transfer System (E-525)	2,712.4	2,712.4	3,154.3	0.0	0.0%	-441.9	-16.3%	2,712.4	0.0	3,154.3
5.08.05	Retrieval / Closure Program	145,563.0	145,924.0	136,825.3	361.0	0.2%	9,098.7	6.2%	151,776.5	0.0	142,152.8
5.08.06/.07	SST Retrieval East / West Area	52,029.6	92,300.1	94,579.1	40,270.5	77.4%	-2,279.0	-2.5%	52,663.3	42,570.8	97,395.6
5.08.12/.13	SST Closure	1,359.2	1,318.1	1,057.5	-41.1	-3.0%	260.6	19.8%	1,453.3	0.0	1,090.6
	TOTAL RETRIEVE AND CLOSE	227,464.8	274,539.5	267,028.1	47,074.7	20.7%	7,511.4	2.7%	235,167.4	49,093.7	275,818.1
5.9	**TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements**	16,806.0	17,056.4	11,887.3	250.4	1.5%	5,169.1	30.3%	18,002.7	0.0	12,726.8
5.09.02.02	TRU / LLW Packaging	0.0	0.0	65.6	0.0	0.0%	-65.6	-65.6%	0.0	0.0	65.6
5.09.02.03/.08	LAW Treatment	2,075.6	2,075.6	2,065.3	0.0	0.0%	10.3	0.5%	2,150.2	0.0	2,074.4
5.09.02.05/.11	Bulk Vitrification System (BVS) Project	28,267.5	42,109.2	45,632.3	13,841.7	49.0%	-3,523.1	-8.4%	28,283.4	13,841.7	45,667.7
5.09.03.01	Integrated Disposal Facility	7,132.9	7,132.9	5,352.0	0.0	0.0%	1,780.9	25.0%	7,132.9	0.0	5,352.0
5.09.03.04	Initial IHLW Storage Facility (W-464)	109.4	109.4	35.1	0.0	0.0%	74.3	67.9%	109.4	0.0	35.1
	TOTAL TREAT AND DISPOSE WASTE	54,391.4	68,483.5	65,037.6	14,092.1	25.9%	3,445.9	5.0%	55,678.6	13,841.7	65,921.6
5.10	**ANALYTICAL/TECHNICAL SERVICES**	73,620.1	73,461.9	66,307.3	-158.2	-0.2%	7,154.6	9.7%	76,397.0	0.0	69,093.9
TFC TOTAL		**806,290.7**	**872,474.2**	**814,293.2**	**66,183.5**	**8.2%**	**58,181.0**	**6.7%**	**834,298.5**	**71,665.2**	**842,550.7**
					BAC					**834,298.5**	
					Adjusted Total with Accelerated Scope					**905,963.7**	

* BAC on this chart and in succeeding Cumulative Performance tables is for the period FY 2006 - FY 2008.

** The following accelerated work is included in the EAC and in the adjusted total: Tanks 241-C-104, 241-C-110, 241-S-102 Retrievals; W-314 and WFO Upgrades work; Cross-Site Transfer; and DBVS Technology Development.

*** EAC on this chart is for the contract period (through FY 2008).

EARNED VALUE PERFORMANCE

5.07 – BASE OPERATIONS (EXCLUDES 5.07.02)

Scope Description: The baseline scope for this Work Breakdown Structure (WBS) includes monitoring and maintaining the DSTs and equipment in compliance with Tank Safety Requirements (TSR), and Environmental, Safety, Health, and Quality programmatic requirements. This scope also includes necessary support activities such as project management, engineering, business services, and support to training and procedures. Base Operations also provides site, shared, and miscellaneous services including Service Assessment Pool and Advanced Medical Services. In addition, the contract fee for fiscal year (FY) 2006 is included.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	12,031.4	11,277.1	8,152.9	-754.3 -6.3%	3,124.2 27.7%	
CTD	401,409.8	402,671.9	364,246.9	1,262.1 0.3%	38,425.0 9.5%	416,328.4

Note (All tables): Dollars in thousands.

SCHEDULE VARIANCE

Description and Cause: The CM SV is within the reporting threshold of +/- 10 percent or $1.0M.

The CTD SV is due to accelerated work completed on AY/AZ Upgrades (AZ-102 supernatant pump replacement required to support AZ-102 blending transfers) and Environmental Health Program characterization for vapors solutions (T and U Farms). These favorable CTD variances are partially offset by unfavorable variances for: 1) Waste Feed Operations (WFO) Waste Compatibility Program (deferral of BDGRE work not needed due to delay in Tank C-110 Retrieval); 2) AP Farm Upgrades (AP-101 jumper installation [behind schedule] and AP-103 in-process leak check/level rise [deferral to outyears]); 3) 242-A Evaporator Upgrades due to deferral of the exhauster long lead procurement and fabrication work to FY 2009; and 4) DST Infrastructure Upgrades due to delays in the repair of Line SLL-3160, specifically initiating work on SL-3160 encasement leak check (low priority; FY 2007 activity will be deferred to the outyears).

Impact: Re-prioritization of work has been addressed and re-planning of work implemented via change action or pending changes.

Corrective Action: The SV will continue on accelerated work for the remainder of this fiscal year. Completion of the Tank C-110 BDGRE work is expected to be deferred to FY 2009. The repair of Line SLL-3160 will be deferred to the outyears because it is low priority work. The AP Farm Upgrade AP-101 jumper installation will be completed to support the AP-101 to AW-102 transfers that are prerequisites for the second Evaporator campaign. The AP-103 in-process leak check is being evaluated for potential deferral to the outyears.

COST VARIANCE

Description and Cause: The CM CV is due to: 1) WBS 5.07.03, Project Support, for progress in the current month on Contract Transition (resulting from implementation of Baseline Change Request [BCR] RPP-08-042); cost accrual

reversal in Finance (for sales tax related to LMSI Services); cost efficiencies in IRM (including Program and Requirements Management and desktop support; costs less than planned); Manage Facilities and Property Services (related 2440 occupancy); efficiencies in Standards and Compliance (resulting from reallocation of manpower to Core Training and Core procedures); and miscellaneous other cost efficiencies; 2) WBS 5.07.04, Essential Services, for costs less than planned (Fluor Hanford [FH] costs for Shared Services and Miscellaneous Services and labor Liquidations [work for others higher than planned]); and 3) WBS 5.07.01, Base Operations, for Tank Waste Sampling (less than planned labor and crane and rigging support and labor costs less than planned rates); WFO Safe Storage Surveillance/Monitoring (efficiencies and support to field activities); WFO Essential Services (resources assigned to support higher priority work); and miscellaneous cost efficiencies in the Engineering Program (increased use of program resources to support field activities), Core Training Program, Facilities Operations Management (staffing efficiencies), Industrial Health and Safety, and Quality Assurance.

These favorable CM variances are partially offset by: 1) WBS 5.07.05, Other Mission Support for Evaporator Upgrades (HVAC Upgrade costs due to complexity, emergent work, accelerated schedule, and concurrent facility project upgrades, and corrective/maintenance activities; MCS Upgrade costs for engineering to develop software documentation, resolution of relay failure issue, and rework of heater and control cabinet design and installations, and extended duration for the OAT).

Significant contributors to the CTD favorable CV include efficiencies and cost savings in: 1) Essential Services (FH allocation for General Site-Wide Services and Shared Services and Miscellaneous Services [AdvancedMed Hanford Services, Technical Library, DOE, Richland Operations Office service assessment pool Allocation, and miscellaneous services] and liquidation of Continuity of Service [COS] rates on labor [more employees worked for others than anticipated in the baseline]); 2) Ongoing efficiencies in Base Operations (WFO Safe Storage Surveillance and Monitoring, Tank Waste Sampling, WFO Essential Services, Industrial Health and Safety/Health and Safety Plan [HASP], Engineering Program, Assessments, QA Program, Nuclear Operations Program Management, WFO Facilities Operations Management, Price Anderson Amendment Act [PAAA] Program, WFO Bargaining Unit Training, WFO Waste Compatibility Program and Radiation Protection Program); 3) Ongoing efficiencies in Project Support (Standards and Compliance, IRM, TFC Executive Management, Legal Counsel, RPP Baseline Integration Support, and Manage Facilities and Property Services); and 4) Other Mission Support efficiencies on AY/AZ Upgrades (use of spare pump for AZ-102 replacement instead of new procurement) and Work Force Realignment and Restructure (fewer employees impacted than anticipated by 2006 Involuntary Reduction of Force).

The favorable CTD variances are partially offset by: 1) unfavorable WBS 5.07.01, Base Operations, variances related to WFO TSR/Basic Maintenance (efforts to reduce and maintain the PM/CM backlog and support to Tank Retrieval acceleration including DST-to-DST Transfers and Cross-Site Transfer, electrical outages, and cathodic protection); WFO Parts/Materials/Tools (fabrication costs for jumpers and parts, purchase of cameras, parts and materials for PMs/CMs, and materials to support additional DST-to-DST and Cross-Site Transfers); WFO Infrastructure (unplanned expenditures for 274 AW parking lot and unanticipated Project Hanford Management Contract [PHMC] support charges), WFO Radiological Control Surveys (FY 2006 costs for additional surveillances/routines on overtime and additional laboratory costs incurred); and Environmental Health Program costs (vapors sampling support and ATL Readiness to Serve adder); 2) Unfavorable WBS 5.07.03, Project Support, variances related to Procurement and Contracts costs (work performed on the Marshalling Yard and Connector Road Improvements), Labor Relations (subcontractor support to Hanford Atomic Metal Trades Council Contract negotiations and ratification), SWE (subcontracts), Travel and Computer, Communications; and 3) Unfavorable

variances related to WBS 5.07.05, Other Mission Support, for Evaporator Upgrades (HVAC Upgrade costs due to complexity, emergent work, accelerated schedule and concurrent facility project upgrades, and corrective/ maintenance activities; MCS Upgrade costs for engineering to develop software documentation and resolution of relay failure issue and rework of heater and control cabinet design and installations, and extended duration of the OAT); and Tank Farm Upgrades Program Support (additional staff augmentation engineering to support Unresolved Safety Questions [USQ], project work, Hazards Operations (HAZOP) issue resolutions, and Pension pass-back distribution for FYs 2006 and 2007.

Impact: None.

Corrective Action: The favorable CVs are expected to continue for the remainder of the fiscal year on the ongoing level of effort (LOE) Base Operations, Support and Essential Services accounts. The unfavorable CVs for completed work are not recoverable. Work has been reprioritized to meet mission objectives for the remainder of the Contract period.

5.07.02 – ENVIRONMENTAL/TRI-PARTY AGREEMENT MILESTONE ACHIEVEMENT

Scope Description: The baseline provides for the safe and compliant storage of the Hanford Site tank wastes until waste is retrieved for processing (currently 53 million gallons of waste in 177 SSTs and DSTs and approximately 60 miscellaneous underground storage tanks). This includes monitoring and maintaining activities associated with the Hanford Federal Facility Agreement and Consent Order, commonly referred to as the Tri-Party Agreement (TPA). Scope includes compliance efforts to meet TPA Milestones M-23, M-46, and M-48, including characterization, DST Space Management, and DST Integrity. Scope includes transfer operations, and the operations and maintenance of the 242-A Evaporator to reduce the volume of waste stored in DSTs.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	1,017.2	1,157.9	1,347.5	140.7 13.8%	-189.6 -16.4%	
CTD	49,404.6	53,317.4	51,673.3	3,912.8 7.9%	1,644.1 3.1%	50,727.1

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to progress earned on acceleration of two Evaporator campaigns.

The CTD favorable SV is due Accelerated work (planned outside the contract period in the baseline) completed for Cross-Site Transfers, the SY PPP Line Replacement, and DST-to-DST Transfers (supports tank retrievals, Evaporator campaigns, and tank level increases).

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM unfavorable CV is due to 242-A Evaporator Operation and Maintenance (regular and overtime labor, materials, and subcontract support associated with emergent work activities, painting the condenser room, and re-rating the 242-A feed line).

CM unfavorable variance is partially offset by favorable variances for the Environmental Support and Assessment Program, DST-to-DST Transfer, and DST Space Evaluation.

The CTD favorable CV is due to: 1) Efficiencies on DST-to-DST Transfers (minimization of overtime by use of shift personnel and same planning package for back-to-back transfers); 2) Efficiencies on Cross-Site Transfers (labor); 3) LOE efficiencies on Environmental Support and Assessment Program; 4) Efficiencies on DST Facility Upgrades Project Management; and 5) Cost reductions on DST Space Evaluation (shift to higher priority work and reduction of staff).

The CTD favorable CVs are partially offset by unfavorable variances for: 1) DST Integrity Project (increased cost for completed work on the AP Valve Pit Integrity Assessment, DST Infrastructure Integrity Assessment, 242-A Evaporator Integrity Assessment and Ultrasonic Examination, AY-101 UT Support, and miscellaneous associated Independent Qualified Registered Professional Engineer (IQRPE) support to integrity assessment); 2) 242-A

Evaporator Operations and Maintenance (increased overtime and regular labor to support additional [3x] PMs for the MCS Upgrade OAT, materials, and contract support for the PB-1 pump refurbishment, Crane and rigging costs higher than expected and distributions for pensions and retroactive pay); 3) Catch Tank Pumping (isolation of Silver List Catch Tanks UX-302-A and ER-311); and 4) Increase Specific Gravity (FY 2006 overruns).

Impact: None.

Corrective Action: Cost overruns for completed work are not recoverable. Efficiencies are expected to continue on DST-to-DST Transfers. Work has been prioritized within available funds.

5.08 – RETRIEVE AND CLOSE (EXCLUDES 5.08.02/.03; 5.08.04.01/.02; 5.08.05/.06/.07/.12/.13)

Scope Description: In the future, specific life cycle scope in this WBS includes DST Retrieval and Closure, Closure of Long Term Facilities, and Post Closure Monitoring. These activities are all outside of the contract period reporting window. The scope also includes preparation of a 200-IS-1 Operable Unit Work Plan and the Sampling and Analysis Plan as directed by the ORP.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	0.0	298.2	217.0	298.2 298.2%	81.2 27.2%	0.0

SCHEDULE VARIANCE

Description and Cause: The CM SV is within the reporting threshold of +/-10 percent or $1.0M.

The CTD favorable SV is due to ORP directed acceleration of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) IS-1 work plans in support of the RL TPA M-15 Milestones.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the reporting threshold of +/-10 percent or $1.0M.

The CTD favorable CV is due to cost savings in closure of old cross-site transfer lines.

Impact: None.

Corrective Action: None required.

5.08.02 – WASTE TREATMENT PLANT FEED DELIVERY PROGRAM

Scope Description: The Waste Feed Delivery (WFD) program provides the minimum required technical analysis, waste characterization, and project definition activities necessary to provide waste to the WTP. The WFD program work activities include a variety of cross-cutting programmatic activities supporting WFD to the waste treatment facilities, including characterization, WFD engineering and modeling support including management and maintenance of the retrieval and transfer technical baseline, WFD program/ project management support, and DST retrieval/transfer management. This work element will provide feed delivery evaluations using the Hanford Tank Waste Operations Simulator (HTWOS) model.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	585.6	585.4	313.4	-0.2 0.0%	272.0 46.5%	
CTD	21,258.5	21,258.4	17,985.8	-0.1 0.0%	3,272.6 15.4%	22,019.8

SCHEDULE VARIANCE

Description and Cause: The CM and CTD variances are within the reporting threshold of ±10 percent or $1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM favorable CV is due to 1) Cost reductions in the Office of Vice President Project Delivery due to transition of staff from the DBVS Project; 2) Cost efficiencies in WFO Project Controls performance realized by improved systems, organizational realignment and co-location of personnel; 3) Cost efficiencies in Tank Waste Database Management due to staff reductions resulting from assignment to higher priority work; and 4) Startup and Testing (use of direct staff instead of subcontracted labor and reduced material usage).

CTD favorable CVs are due to ongoing cost efficiencies in 1) Level of effort labor for WFO Project Controls (improved systems, organizational realignment and co-location to improve performance); 2) Tank Waste Database Support (staff reductions); and 3) Startup and Testing (use of direct staff instead of subcontracted labor and reduced material usage).

Favorable CTD CVs are partially offset by unfavorable CVs for: 1) Office of VP Project Delivery (additional unplanned DBVS staff assigned to manage external review issue resolution and exhauster fabrication cost correction to support vapors); and 2) DST research and technology System Technical Baseline (additional scope and cost for the RPP System Plan and HTWOS model runs for SST sequence and mission modeling).

Impact: None.

Corrective Action: None required.

5.08.03 – DST RETRIEVAL PROGRAM

Scope Description: The baseline for this WBS element includes activities required to plan, provide, and operate systems for retrieving waste from the DSTs, preparing it for feed to the WTP, and then transferring it to the WTP.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	1.0	0.0 0.0%	-1.0 0.0%	
CTD	1,676.3	1,984.2	2,270.8	307.9 18.4%	-286.6 -14.4%	1,676.3

SCHEDULE VARIANCE

Description and Cause: The CM SV is within the reporting threshold of +/-10 percent or $1.0M.

The CTD favorable SV is due to acceleration of the Tank 241-AN-101 Retrieval Systems work (design, construction, and startup) in support of Tank 241-C-104 Retrieval.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the reporting threshold of +/- 10 percent or $1M.

The CTD unfavorable CV is due to previous cost overruns on the AN-101 mixer pump procurement, which are partially offset by cost efficiencies on accelerated work for the AN-101 Retrieval System and LOE Project Support to Construction of DST Retrieval Systems.

Impact: None.

Corrective Action: None required.

5.08.04.01 – PROJECT W-314 (TANK FARM RESTORATION AND SAFE OPERATIONS)

Scope Description: The baseline for Project W-314 provides essential tank farm infrastructure upgrades to support WFD to the WTP and to correct environmental compliance deficiencies with the tank farm support systems. Work scope includes completion of the Waste Transfer System, AN, AP, AW, and SY Farm electrical Upgrades, AN and AW Heating, Ventilation, and Air Conditioning (HVAC) Exhausters and the MPS/ MCS. Project Management, Project Support and Startup, Testing, Readiness, and Turnover to Operations are also included.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	325.3	333.2	325.3 325.3%	-7.9 -2.4%	
CTD	2,865.8	8,744.1	10,938.3	5,878.3 205.1%	-2,194.2 -25.1%	2,865.8

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to acceleration of the Project W-314 Phase 2 AW Upgrades and Phase 2 Startup, Testing and Turnover work related to the AN and AW exhausters.

The CTD favorable SV is due to the acceleration of Project W-314 work including all Farm electrical upgrades, the MPS/MCS, AN and AW HVAC Exhausters and Phases 1 and 2 Startup, Testing, and Turnover, and Readiness.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the reporting threshold of +/- 10 percent or $1M.

The CTD unfavorable CV is due to: 1) Increased cost of the Phase 1 Startup, Testing, and Turnover (MPS/MCS due to increased labor required for Engineering support to bring the system on line, debugging of programming, test bed setup, and new CITECT software license and system upgrades); 2) Costs to complete the AW Upgrades (FY 2007 costs for emergent construction activities on the encasement leak detectors and emergent construction activities originating from walk downs, testing of the AW exhausters and HAZOP evaluations, overtime to maintain schedule, engineering to update project and facility documents, and costs to develop the construction acceptance tests which were under-estimated); 3) Unfavorable variances on the AP Upgrades (construction and Engineering effort for troubleshooting and Engineering to update and as-built project and facility documents and pit upgrades performed in FY 2006); 4) Startup, Testing, and Turnover Phase 2 costs related to trouble shooting and repair of test deficiencies discovered during performance of the Cold OATs for the AN and AW exhausters, including resolution of communication issues found during testing, rework of failed pressure transmitters, communication modules and miscellaneous instruments, and development and download of software upgrades; and 5) Minor cost overruns to complete the Phase 2 SY Upgrades and Waste Transfer System (WTS).

5.08.04.02 – PROJECT E-525 (UPGRADE TRANSFER SYSTEMS)

Scope Description: The baseline for Project E-525 provides activities required to define, design, procure, construct, test, turnover, and manage modifications to a portion of the DST Transfer System. The scope of Project E-525 is further defined within the following five design/construction packages: 1) AZ-151 Catch Tank Replacement; 2) Clean-Out Box (COB) Modifications; 3) SY Farm Transfer Lines; 4) 204-AR Load-Out Facility Transfer Line; and 5) Plutonium Finishing Plant Transfer Lines. These modifications brought a portion of the DST transfer system into compliance with Washington Administrative Code 173-303-640, in support of TPA Milestone M-43-00.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	2,712.4	2,712.4	3,154.3	0.0 0.0%	-441.9 -16.3%	2,712.4

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the reporting threshold of ±10 percent or $1M.

No work has been performed on Project E-525 in the FY 2007/FY 2008 period.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is due to cost adjustments for final closeout of construction subcontracts.

The CTD unfavorable CV is due to cost overruns on construction of COBs and the SY Farm Transfer Line Backfill (work performed on supplied air that was not budgeted for at the time). Unfavorable CV for construction is partially offset by cost efficiencies on the AZ-151 Catch Tank Bypass Construction and in LOE Project Support.

Impact: None.

Corrective Action: None required.

5.08.05 – RETRIEVAL /CLOSURE PROGRAM

Scope Description: The baseline provides for Retrieval and Closure support activities in this WBS. Specifically, the scope includes program management, regulatory documentation, SST cross-site transfers, technology development, Cold Test Facility (CTF) management and maintenance, Vadose Zone support, inactive waste sites administration, and Tank Farm Support Facilities/Transfer Systems. The scope also includes the Closure Project TSR/Basic Maintenance on SSTs, Closure Project Operations Essential Services, Closure Project Field Projects/Upgrades, and the solid waste management programs.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	4,896.1	5,224.4	4,065.9	328.3 6.7%	1,158.5 22.2%	
CTD	145,563.0	145,924.0	136,825.3	361.0 0.2%	9,098.7 6.2%	151,776.5

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SVs are within the reporting threshold of +/- 10 percent or $1M.

Impact: Re-planning of work has been implemented via approved BCRs.

Corrective Actions: The CTD behind schedule work related to Liquid Mitigation of Catch Tanks and HIHTL is ongoing and is expected to recover by the end of FY 2008.

COST VARIANCE

Description and Cause: The CM CV is due to Vadose Zone RCRA Corrective Actions (cost efficiencies on additional Vadose characterization work in TY and S/SX Farms to support potential new interim surface barriers); HIHTL Disposition (cost efficiencies on work for removal and disposal of HIHTLs); less labor than planned for SST Operations Essential Services, which is partially offset by SST and DST TSR)/Basic Maintenance labor assigned to the SST PM/CM backlog reduction; Closure Project Office of the Vice President (VP) (reduced labor due to reorganization); and Waste Management Program/Administration (lag in the treatment of low-level waste [LLW] volume and mixed waste that has been shipped to the treatment contractor).

The favorable CM CVs are partially offset by unfavorable variances for: 1) Liquid Mitigation of Catch Tanks (delays in field activities associated with implementation of corrective actions from the Tank S-102 spill event); and 2) SST TSR/Basic Maintenance (higher than planned labor for PMs and CMs).

The CTD favorable CV is due to: 1) Underruns in SST Operations Essential Services (labor planned in Essential Services being utilized in SST TSR/Basic Maintenance account to complete preventive and corrective maintenance activities); 2) Cost savings on Isolate Transfer System Components work (FY 2006 labor and construction); 3) Cost efficiencies in Infrastructure support from FH and LMSI (lower than projected support required); and 4) Miscellaneous other cost efficiencies and savings in Grand Junction Gamma Logging (reduced requirement to support LOE activity), Waste Management Program/ Administration (less than planned waste projections and actual labor rates less than planned rates), Liquid Level and Video Assessment (underruns on completed work), Tank Farms Risk Assessments (efficient use of in-house staff instead of subcontractors as planned), Retrieval Technology Development, CTF

Management and Maintenance (lower share of cost as other programs used the facility), HIHTL (re-planning of prior year work), and 244-CR vault (re-planning of prior year work).

The favorable CTD CVs are partially offset by unfavorable variances for: 1) Vadose Resource Conservation and Recovery Act of 1976 (RCRA) Corrective Actions T Farm Interim Surface Barrier work exceeding the baseline estimates (design, procurement, weather, and construction scope issues including additional steps to complete the required work such as transportation of soil into the respective area, grading, and compaction of soil prior to placing material, development of an infiltration area for water run-off, interior trench and anchor supports for the material and associated material costs); 2) SST TSR Basic Maintenance (higher than expected labor costs being incurred to complete basic PMs/CMs and maintain the backlog and support accelerated retrievals; overruns here are being offset by underruns in SST Essential Services); and 3) Closure Operations Office of the VP (unplanned purchase of spare cameras, unplanned costs for vapor sampling for chemicals of concern, and unplanned costs for the carpenter shop conversion).

Impact: Overall, the Retrieval/Closure Program is maintaining a favorable CTD CV.

Corrective Action: Cost efficiencies and savings are expected to continue for support activities and SST Operations Essential Services for the remainder of the fiscal year. Measures were previously implemented to reduce the costs on the T Farm Interim Surface Barrier construction work (streamlined the management structure, implemented weather enclosure to apply polyurea in bad weather, and optimized staff). BCRs have been implemented, as discussed above, for needed re-planning of work. Behind schedule work for Liquid Mitigation of Catch Tanks and HIHTL is expected to recover by the end of FY 2008.

5.08.06/.07 – SST RETRIEVAL EAST /WEST AREA

Scope Description: The baseline for this element includes activities required for the retrieval of all 149 SSTs. The scope includes project management, design and engineering, retrieval procurement, retrieval system installation, and retrieval startup and readiness. Scope in this WBS also includes the operations of the SST retrieval systems, post retrieval sampling, and the retrieval data reports.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	600.7	2,230.1	3,138.0	1,629.4 271.3%	-907.9 -40.7%	
CTD	52,029.6	92,300.1	94,579.1	40,270.5 77.4%	-2,279.0 -2.5%	52,663.3

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to significant progress earned for accelerated work on Tank C-110 Retrieval (management, design and engineering, procurement, system installation construction, and startup and readiness).

The CM favorable SVs are partially offset by: 1) Budget in the current month for Tank C-109 Retrieval Operation (completed in prior months); and 2) Delays in Tank S-102 Retrieval (operations and maintenance shutdown pending spill recovery and cleanup actions).

The CTD favorable SV is due to: 1) Accelerated work performed on retrieval of Tanks S-102, C-104, C-110, and C Farm Infrastructure; and 2) Work completed ahead of schedule on retrieval of Tanks C-108 and C-109 (design, construction, startup, and retrieval).

Impact: The favorable SVs will continue on accelerated work for the remainder of this fiscal year. The favorable SVs will zero out by the end of FY 2008 for work ahead of schedule.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM unfavorable CV is due to: 1) Costs associated with Tank C-110 Retrieval (overtime and shift differential to complete the Retrieval System Installation); CTD, this Tank Retrieval has a favorable CV; 2) C Farm Infrastructure (costs for shutdown and placement of the work in a safe standby); and 3) Tank S-102 (unplanned costs for the Tank S-102 leak event cleanup and evaluation of retrieval path forward [CTD, S-102 Retrieval has a positive CV]).

The CTD unfavorable CV is driven by: 1) Unplanned costs for Tank S-102 leak event investigation, corrective actions, and cleanup; 2) Tank C-104 Retrieval (additional and unplanned construction costs for a second construction crew, delays, costs associated with the impacts of S-102 corrective action implementation [compensatory measures and engineering requirements]; costs incurred for shutdown and safe standby work once the decision was made to focus resources on retrieval of Tank C-110; and C-104 Design and Engineering [unplanned costs for design review changes due to additional requirements]); and 3) Tanks C-100 and C-200 Retrievals due to prior year overruns on C-103 and C-201 to C-204 retrievals due to technical difficulties.

The CTD unfavorable CV is nearly offset by efficiencies in Retrieval of Tanks C-108, C-109, C-110, S-102, S-109 (partial retrieval), and S-112.

Impact: The large favorable CV generated through retrieval efficiencies and savings was reduced by Tank S-102 recovery costs and impacts on C Farm retrieval due to implementation of compensatory measures, Engineering requirements, and process improvements (technical evaluations, Process Hazards Analyses [PHA], and Level 2 Readiness Assessments [RA]) and technical difficulties with the mobile retrieval tool (MRT).

Corrective Action: Cost impacts have been factored into the FY spend forecasts and work prioritized within available funds. Retrieval operation concluded on Tank C-109 in July 2008. Work on Tanks C-104 and C-108 retrieval has been postponed to focus resources and remaining funding on Tank C-110 retrieval. Continued acceleration of C-110 Hard Heel Removal will help minimize the unfavorable cost impacts from the S-102 spill event and associated recovery actions.

5.08.12/.13 – SST CLOSURE

Scope Description: The baseline provides the scope for tank farm closure, which includes those activities required for interim closure of each tank in the farm, followed by closure of the entire farm once all tanks within the farm are interim closed. Scope for interim closure of each tank includes characterization, engineering evaluation and reporting, deactivation and isolation of transfer lines, pits and penetrations to the tank, and placement of a grout layer in the bottom of the tank to stabilize the residual waste.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	106.6	199.4	14.0	92.8 87.1%	185.4 93.0%	
CTD	1,359.2	1,318.1	1,057.5	-41.1 -3.0%	260.6 19.8%	1,453.3

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to WBS 5.08.13, SST Closure, for S-Farm Closure Management progress earned in support of the S-112 HIHTL work.

The CTD SV is within the reporting threshold of ±10 percent or $1M.

Impact: No impact.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is due to S-Farm Closure Management (progress taken here but costs are under WBS 5.08.05.09.12, Hose-in Hose Transfer Line Disposition [SST]).

The CTD CV is due to the same cause as the CM CV.

Impact: None.

Corrective Action: None required.

5.09 – TREAT AND DISPOSE WASTE (EXCLUDES WBS 5.09.02.02/.03/.05/.08/.11; 5.09.03.01/.04)

Scope Description: The baseline provides for the remaining scope for WBS 5.09, which includes the Infrastructure Services that provide for electrical power to the WTP, Strategic planning including the support to Optimization Studies, the newly established IPS Project, Project W-QQQ immobilized high-level waste (IHLW) Shipping Facility support, and support to the TPA Milestone M-62-08 deliverables. Also included are the Failed Melter Disposal System and future expansions to Integrated Disposal Facility (IDF). Both are outside of the CTD reporting. Startup and Turnover, performance of Operations Readiness Reviews, and turnover of the constructed IDF to Operations are included in this WBS. Additional work was added under WBS 5.09.02.12 in FY 2008 for the Interim Pretreatment System (IPS) Project

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	947.1	1,266.8	372.6	319.7 33.8%	894.2 70.6%	
CTD	16,806.0	17,056.4	11,887.3	250.4 1.5%	5,169.1 30.3%	18,002.7

SCHEDULE VARIANCE

Description and Cause: The CM SV is due to WBS 5.09.02, Supplemental Treatment, for IPS Project work performed ahead of schedule (Project Support, Safety Analysis, and Technology Development).

The CTD SV is within the reporting threshold of ±10 percent or $1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM favorable CV is driven by: 1) Efficiencies in the IPS Project (Project Support, Safety Analysis, and Technology Development labor less than planned; labor costs less than planned due to self-performance instead of subcontractors; and Technology Development where work to support research and development [R&D] testing of Fractional Crystallization is being costed at the Savannah River National Laboratory [SRNL] and in the Pretreatment Program WBS 5.09.02.08); 2) Labor efficiencies in Supplemental Treatment Strategic Planning; 3) Infrastructure Services Phase 1 (less electrical usage at the WTP than planned); and 4) Efficiencies on the IDF Operations.

The CTD favorable CV is due to 1) Infrastructure Services Phase 1 (less electrical usage at the WTP than planned); 2) Labor efficiencies in Strategic Planning; 3) Cost efficiencies on the IPS Project Support and Technology Development; 4) Underruns in the immobilized low-activity waste (ILAW) Baseline Management, Systems Definition and Performance Assessment; and 5) Underruns in IHLW Baseline Management and Systems Definition.

The favorable CTD CV is partially offset by overruns in the IDF Operations care and custody (equipment calibrations and performance testing, procedure development, training and habitat mitigation).

Impact: None.

Corrective Action: None required.

5.09.02.02 – TRU/LLW PACKAGING

Scope Description: The baseline provides for the design, construction, testing, operation, and decommissioning of a system to treat contact-handled transuranic mixed (CH-TRUM) waste for eventual shipment/disposal at the Waste Isolation Pilot Plant, including: 1) CH-TRUM Waste Packaging: Nine tanks are currently thought to contain CH-TRUM waste: four T-200 series SSTs, four B-200 series SSTs, and Tank 241-T-111; 2) Remote Handled Transuranic mixed (RH-TRUM) Waste Packaging: Three tanks are currently thought to contain RH-TRUM waste: 241-AW-103, 241-AW-105 and 241-SY-102; and 3) LLW Packaging: activities required to operate a system to package LLW such that the packages can be sent to a licensed facility for disposal. One tank, 241-T-110, is currently thought to contain LLW. The volume of LLW in this tank is approximately 400,000 gallons.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	0.0	0.0	65.6	0.0 0.0%	-65.6 -65.6%	0.0

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the reporting threshold of ±10 percent or $1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the reporting threshold of +/-10 percent or $1.0M.

The CTD unfavorable CV is due to residual costs received in early FY 2006.

Impact: None.

Corrective Action: None required.

5.09.02.03/.08 – LAW TREATMENT

Scope Description: This work element includes the facilities and systems to treat LAW that will not be treated at the WTP. The work scope includes design, permitting, procurement, construction, startup and testing, readiness, operations, and decontamination and decommissioning of a treatment facility in the 200 East Area. Scope includes the same activities for a 200 West Area facility and a 200 West Area Pretreatment Facility.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	57.4	57.4	39.1	0.0 0.0%	18.3 31.9%	
CTD	2,075.6	2,075.6	2,065.3	0.0 0.0%	10.3 0.5%	2,150.2

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the reporting threshold of ±10 percent or $1M.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is due to efficiencies in management of a 200 West Area Pretreatment Facility.

The CTD CV is within the reporting threshold of ±10 percent or $1M.

Impact: None.

Corrective Action: None required.

5.09.02.05/.11 – DEMONSTRATION BULK VITRIFICATION SYSTEM PROJECT

Scope Description: The baseline provides work scope to issue procurement package and award contract; contract costs; support contract costs; and direct labor costs for project management and control, permitting, safety document preparation, readiness review activities, and engineering for the following: 1) vendor design, fabrication, construction, installation, testing, and operation of a Supplemental Treatment Test and Demonstration Facility; 2) vendor design and fabrication of a salt waste retrieval system; and 3) vendor design and construction required for Supplemental Treatment Test and Demonstration Facility site preparation, including infrastructure. The following is also provided: 1) direct labor costs for installation, startup, and operation of a salt waste retrieval system; material and utility costs in support of Supplemental Technology Demonstrations; and 2) decontamination and decommissioning costs associated with Supplemental Technology Demonstrations.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	12.2	12.2	13.6	0.0 0.0%	-1.4 -11.5%	
CTD	28,267.5	42,109.2	45,632.3	13,841.7 49.0%	-3,523.1 -8.4%	28,283.4

SCHEDULE VARIANCE

Description and Cause: The CM favorable SV is within the reporting threshold of ±10 percent or $1M.

The CTD favorable SV is due to accelerated work performed on the DBVS Project Technology Development and Design to support resolution of the ERP issues/final design (IDMT, Molten Ionic Salts, and CD-2/3).

Impact: None.

Corrective Action: None.

COST VARIANCE

Description and Cause: The CM favorable CV is negligible.

The CTD unfavorable CV is due to additional subcontractors' effort to complete initial design (in prior years), retroactive subcontractor rate adjustments resulting from a DCAA audit, cost overruns on DBVS Engineering during construction, and cost overruns on DBVS Procurement (for unplanned storage and maintenance of equipment awaiting restart of construction). The unfavorable CTD CV is partially offset by cost efficiencies on DBVS Project Support and the recent DBVS Technology Development work for the IDMT.

Impact: The CTD CV for completed work is not recoverable. Additional funding is required for follow-on testing to optimize mixer/dryer pellet production.

Corrective Action: Sources of additional funding are being investigated for modest testing program in FY 2009 provided ORP determines a path forward and directs performance of the work.

5.09.03.01 – INTEGRATED DISPOSAL FACILITY

Scope Description: The baseline provides for planning, designing, and constructing the onsite, expandable IDF for disposing of compliant ILAW stream packages produced at the WTP and through supplemental treatment, and the RL-generated mixed low-level waste (MLLW) and LLW. The IDF will consist of the initial capacity near-surface, remote handled waste trench facility to support WTP Operations ILAW production, and the RL MLLW and LLW disposal quantities. This WBS will provide infrastructure necessary to provide operations and maintenance support (e.g., utilities, roads, and fencing).

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	7,132.9	7,132.9	5,352.0	0.0 0.0%	1,780.9 25.0%	7,132.9

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the reporting threshold of ±10 percent or $1M. Work on this facility is complete.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CTD favorable CV is due to cost effective management of the IDF construction changes, utilization of internal engineering resources rather than subcontracted support, and less project management resource usage than planned.

Impact: None.

Corrective Action: None required.

5.09.03.04 – PROJECT W-464 (INITIAL IHLW STORAGE FACILITY)

Scope Description: The baseline provides for Project W-464, Interim Storage Facility, which is a Canister Storage Building Retrofit Subproject that addresses initial operations storage. This element provides onsite interim storage for Initial Operations IHLW canisters until they can be shipped to an offsite geological repository. The planning for receipt and interim storage of the IHLW canisters shall comply with the Waste Acceptance System Requirements Document and the Office of Civilian Radioactive Waste Management Waste Acceptance Preliminary Specifications. This WBS covers equipment for transportation of IHLW canisters from the WTP to the interim storage facilities. The work scope activities included under this WBS element are as follows: Provide Project Management (Capital) and project engineering required for execution of design, procurement, and construction of the Interim Storage Facility.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	0.0	0.0	0.0	0.0 0.0%	0.0 0.0%	
CTD	109.4	109.4	35.1	0.0 0.0%	74.3 67.9%	109.4

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the reporting threshold of ±10 percent or $1M. No work is currently being performed on this project.

Impact: None.

Corrective Action: None required.

COST VARIANCE

Description and Cause: The CM CV is within the threshold of ± 10 percent or $1M.

The CTD favorable CV is due to cost-effective use of support resources on Project W-464.

Impact: None.

Corrective Action: None required.

5.10 – ANALYTICAL TECHNICAL SERVICES

Scope Description: The baseline scope includes ATS management and Hanford Services support in order to meet the capability/capacity requirements on the 222-S Laboratory complex for the Hanford mission. Also included are: 222-S Laboratory spares; 222-S Laboratory spare reserves; capital equipment not related to construction; technology development activities; performance of facility assessment and characterization activities; development of National Environmental Policy Act of 1969 (NEPA) and other regulatory documentation, deactivation plans, post-deactivation surveillance and maintenance plans; development of deactivation endpoints and turnover package; activities to flush, isolate, and blank process or sub-process systems; and removal of radioactive and hazardous materials and mixed wastes.

	BCWS	BCWP	ACWP	SV	CV	BAC
CM	2,145.9	2,135.1	1,779.9	-10.8 -0.5%	355.2 16.6	
CTD	73,620.1	73,461.9	66,307.3	-158.2 -0.2%	7,154.6 9.7%	76,397.0

SCHEDULE VARIANCE

Description and Cause: The CM and CTD SV are within the reporting threshold of ±10 percent or $1M.

Impact: None.

Corrective Action: None.

COST VARIANCE

Description and Cause: The CM favorable CV is due to efficiencies associated with actual labor costs being less than planned and ATL Readiness to Serve costs less than planned.

The CTD favorable CV is due to: 1) Efficiencies in ATS Management technical advisors (attrition and transfer to WFO); 2) Efficiencies in 222-S Services (less than planned ORP steam allocations since payment of capital equipment procurements were completed in FY 2006); 3) Efficiencies in 222-S Safe and Compliant Operations and General Support (less than planned dedicated and matrixed staff, planning rates greater than actual costs, and revised waste volume projections for waste handling are less than originally planned); 4) Cost savings for 222-S Facility Reliability (Maintenance Annex HVAC and roof repair completed under budget); 5) Efficiencies in 222-S Analytical Support (re-direction of Analytical Process Development scientist and Engineering technical support to Technology Development and Tank Sampling analytical support for corrosion control activities); 6) Efficiencies in 222-S Technology Development (less than planned Analytical Methods Development activities in FY 2006 as resources were re-directed to support the Industrial Hygiene Program and vapor analysis); 7) Cost efficiencies in ATL Waste Handling (shipments of waste for processing have been less than planned due to actual analytical production); 8) Efficiencies in ATL Waste Handling Disposition (shipments of waste for processing have been less than planned due to actual analytical production and subsequently the billing of ATL waste handling costs to the end users being less than planned); and 9) ATL Readiness to Serve costs less than planned.

Favorable CTD CVs are partially offset by unfavorable variances for: 1) 222-S Capital Equipment Not Related to Construction (procurement of the gas chromatograph/mass spectrometer [GC/MS] and increased costs associated

with design for the installation of the inductively coupled plasma mass spectrometer [ICP/MS]); and 2) ATL Waste Handling Revenue (shipment of waste for processing have been less than planned due to actual analytical production and subsequently the billing of ATL waste handling costs to the end users being less than planned).

Impact: None.

Corrective Action: Cost estimates have been prepared and some design is proceeding for 222-S Facility Reliability repair/replacement (as required) of the 222S, 222SA, and 222S Maintenance Annex roofs.

Milestone M-45,-50,-60 Single-Shell Tank Corrective Action

I. Near-Term Deliverables:

- **M-45-56, Complete Implementation of Agreed to Interim Measures**
  Due: 07/31/08
  Status: Complete. ORP- Ecology annual meeting held July 22, 2008, to discuss interim measures anticipated next year in Tank Farms. This discussion did not include scope under current negotiations.

- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Master Work Plan that describes the proposed approach for the completion of Corrective Action to meet Final Closure Requirements in the Waste Management Areas as described in Appendix I, Section 2.3**
  Due: 12/31/08
  Status: On Schedule. Draft report submitted for ORP/RL review on September 30, 2008. TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007.

- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C**
  Due: 12/31/08
  Status: On Schedule. Draft report submitted for ORP/RL review on October 1, 2008. TPA Change Request, M-45-06-03 approved by DOE and Ecology on December 4, 2007.

- **M-45-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C**
  Due: 12/31/10
  Status: On Schedule.

- **M-45-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Implementation Work Plan for WMA C**
  Due: 7/31/12
  Status: On Schedule.

II. Significant Accomplishments:

- T-Farm interim barrier monitoring continues.
- Initiated investigations for interim surface barriers in TY and SX Tank Farms.
- Rebaselined the spectral gamma logs of 30 drywells in the T Tank Farm; work continues.

III. Significant Planned Actions in the Next Six Months:

- Complete the WMA C data quality objectives.
- Complete the Master Work Plan.
- Complete the Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C.
- Complete direct push activities in TY Farm in support of an interim surface barrier.
- Initiate next phase of surface geophysical exploration in either C or SX Farm.

IV. Issues

- M-45-61 (CMS submittal) in 2010 is dictated by scope of characterization activities determined via M-45-60 (WMA C work plan and SAP) and EIS schedule.
- There is no apparent maintenance plan for the ongoing maintenance of interim measures.

Milestone M-45-00, Complete Closure of All Single-Shell Tank Farms

SST Retrieval and Closure Program

I. Deliverables

- **M-45-00, Complete Closure of all Single-Shell Tank Farms**
  Due: 9/30/24
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**
  Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)
  Status: Missed.
  - Completion of four limits of technology retrieval demonstrations:
    - Saltcake dissolution (S-112): Completed (M-45-03C).
    - Modified sluicing (C-106): Completed.
    - Vacuum retrieval (C-200s): Completed; C-203 field retrieval operations completed on 3/24/05; C-202 retrieval completed on 8/11/05; C-201 retrieval completed on 3/23/06; C-204 retrieval completed on 12/11/06.
    - Mobile retrieval (C-101, C-105, or C-111): C-101 start of retrieval is currently projected for FY 2011 (October 2010).

  - Implementation of full-scale LDMM technologies for the first three 100-series tank retrievals following Tank S-112:
    - Tank S-102: High Resolution Resistivity System (HRR) installed; supporting retrieval operations.
    - Tank C-103: HRR demonstration complete.
    - Tank C-108: HRR installed; supporting retrieval operations.
    - Completed HRR injection tests at S-102.
    - Submitted HRR evaluation report and recommendation for further deployment.

  - Submittal of TWRWPs:
    - Tanks C-201, C-202, C-203, and C-204: Completed on 4/8/04.
    - Two (2) 100-series tanks by 7/31/04: Completed on 7/29/04 (C-103 and C-109).
    - Four (4) 100-series tanks by 10/31/04: Completed on 10/8/04 (C-102, C-104, C-107, C-108, and C-112).
    - Five (5) 100-series tanks by 1/31/05: Completed on 1/24/05 (C-101, C-105, C-110, and C-111).

- Submittal of Waste Management Area (WMA) integration plans by 6/30/05:
  - WMA C: Completed; submitted from ORP to Ecology on 6/22/05.
  - WMA T: Completed; submitted from ORP to Ecology on 6/22/05.

- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the Period February 2007 through August 2008)**
  Due: 9/30/06
  Status: Missed.

- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the Period September 2008 to September 2013)**
  Due: 1/31/08
  Status: Missed.

- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**
  Due: 10/31/12
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**
  Due: 9/30/18
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
  Due: 9/30/07
  Status: Missed.

- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**
  Due: 9/30/08
  Status: Missed.

- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**
  Due: 9/30/09
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**
  Due: 9/30/10
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**
  Due: 9/30/11
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**
  Due: 9/30/12
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**
  Due: 9/30/13
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**
  Due: 9/30/14
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
  Due: 9/30/15
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
  Due: 9/30/16
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**
  Due: 9/30/17
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**
  Due: 9/30/24
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**
  Due: 3/31/12
  Status: To Be Missed (Based on current DOE Baseline planning).

- **M-45-06-T04, Complete Closure Actions on one WMA**
  Due: 3/31/14
  Status: To Be Missed (Based on current DOE Baseline planning).

II. Significant Accomplishments

- Completed retrieval of approximately 28% of C-110 waste.
- HRR is fully functional procedurally and in the field to support retrieval.
- Continued comments review of RPP-22520, Rev. 4 (241-C-101, 241-C-105, and 241-C-111 Tank Waste Retrieval Work Plan).

III. Significant Planned Activities in the Next Six Months

- Complete comment resolution on the Mobile Retrieval System (MRS) TWRWP (RPP-22520 Rev. 4 for tanks C-101, C-105, and C-111) and obtain Ecology approval.

IV. Issues

- The MRS TWRWP review comment process is ongoing and the TWRWP has not been approved by Ecology. ORP submitted a document update on January 15, 2008.
- Milestones M-45-00B (retrieve all C-Farm tanks), M-45-00C (initiate negotiations on SST retrievals for 2007-2008), and M-45-00D (initiate negotiations on SST retrievals for 2008-2013) were missed. TPA negotiations to address these and other milestones are ongoing.
- Ecology formally requested re-start dates for C-108 and 109, and S-102 in a letter dated September 12, 2008. Restart dates for these retrievals are in the process of being identified.

C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS [a]

Tank	Final Design Drawings complete	Construction Complete	Process Control Plan Complete	Start Retrieval	Complete Retrieval	TSAP Complete	Retrieval Data Report or Appendix H to Ecology/EPA
C-101	7/2/09	8/5/10	9/1/10	10/1/10	1/6/12	12/6/11	9/27/12
C-102	1/14/11	10/13/11	12/9/12	1/9/12	11/20/12	10/20/12	11/18/13
C-103	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-104[c]	1/27/09	6/30/09	4/13/09	7/1/09	2/26/10	1/26/10	11/4/10
C-105	5/2/12	6/5/13	7/30/13	8/30/13	3/6/14	2/6/14	12/4/14
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-107	3/21/14	12/19/14	2/26/15	3/26/15	12/18/15	11/18/15	4/26/17
C-108[d]	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-109[de]	Complete	Complete	Complete	Complete	TBD	TBD	TBD
C-110[bc]	Complete	Complete	Complete	Complete	9/30/09	8/30/09	7/6/10
C-111	8/18/14	9/21/15	11/21/15	12/21/15	4/28/16	3/28/16	1/31/17
C-112	10/18/13	7/23/14	9/9/14	10/9/14	3/25/15	2/25/15	3/1/17
C-201	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-202	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-203	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-204	Complete	Complete	Complete	Complete	Complete	Complete	Complete

a. Completion dates are based on the statused September month-end Integrated Mission Execution Schedule (IMES) as of 9/30/08 and are subject to change as efforts continue to identify and implement schedule efficiencies.
b. Projected dates for C-110 are based on utilizing Modified Sluicing technology and availability of acceleration funding.
c. Schedules are being updated for inclusion of S-102 corrective actions and compensatory measures.
d. Sluicing was performed to the limits of the sluicing system technology.
e. Hard Heel Retrieval using MRT complete to limits of technology, not achieving less than 360 cu ft residual, awaiting future retrieval path forward.

SST RETRIEVAL SEQUENCE DOCUMENT

I. Deliverables

- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02N for further details)**
  Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
  Status: Complete.

- **M-45-02N-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**
  Due: 06/02/08
  Status: On May 15, 2008, Ecology transmitted comments on the M-45-02N deliverable. On July 23, 2008, ORP transmitted letter 08-TF-049 to Ecology with a plan for responding to Ecology comments on and updating the Retrieval Sequence Document (RPP-21216). The revised document was submitted to Ecology on September 12, 2008, by letter 08-TF-062.

- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**
  Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
  Status: On schedule.

- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**
  Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)
  Status: On schedule.

- **M-45-02P-A, Embedded Milestone; Within 60 days of receiving the DST Space Evaluation Document, the Three Parties Shall meet to Establish New Milestones, If Required, for Acquisition of Additional Tanks**
  Due: 4/30/10
  Status: On schedule.

II. Significant Accomplishments

- Submitted the revised Retrieval Sequence Document (RPP-21216) on September 12, 2008.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- Ecology approval of the M-45-02N submittal is still outstanding.

TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

Tank 241-C-106

I. Deliverables

- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**
  Due: 2/27/04
  Status: Complete.

II. Significant Accomplishments

- None.

III. Significant Planned Activities in the Next Six Months

- Continue NRC review of the C-106 exception request. A Request for Additional Information (RAI) is planned for submittal to the NRC in January 2009.
- Continue Performance Assessment workshops with Ecology.

IV. Issues

- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement and associated Record of Decision (ROD); forecast completion for the final EIS ROD is January 2010.

Tank 241-S-102

I. Deliverables

- **M-45-05A, Complete Waste Retrieval from Tank S-102**
  Due: 3/31/07
  Status: Missed. As a result of equipment failure on March 14, 2007, retrieval operations were suspended at Tank S-102 with retrieval approximately 91% complete and approximately 423,000 gallons total waste removed. Retrieval restarted on July 25, 2007, but was suspended after a waste spill on July 27, 2007. The HRR is currently shut down.

- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**
  Due: 6/30/11
  Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**
  Due: 6/30/11
  Status: On schedule.

- **M-45-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**
  Due: 6/30/11
  Status: On schedule.

- **M-45-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE**
  Due: 6/30/11
  Status: On schedule.

- **M-45-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**
  Due: 6/30/11
  Status: On schedule.

II. Significant Accomplishments

- Completed soil cleanup.

III. Significant Planned Activities in the Next Six Months

- Complete recovery actions for the waste leak of July 27, 2007.

IV. Issues

- Retrieval of Tank 241-S-102 was not completed by TPA milestone date of March 31, 2007, due to pump failure.
- On July 27, 2007, a leak of up to 85 gallons of tank waste occurred from the S-102 pumping system. Operations were suspended and recovery actions started.

Tank 241-S-112

I. Deliverables

- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**
  Due: 6/30/05
  Status: Complete.

- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**
  Due: 6/30/11
  Status: On Schedule. Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**
  Due: 12/31/07
  Status: Completed (ORP letter, 07-TPD-066, dated 12/21/07). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank**
  Due: 12/31/07
  Status: Complete (ORP letter, 07-TPD-066, dated 12/21/07). Added by Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

- **M-45-13C, Embedded Milestone, An update to the S-112 Component Closure Activity Plan has been submitted by DOE**
  Due: 6/30/11
  Status: On schedule.

- **M-45-13D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H**
  Due: 6/30/11
  Status: On schedule.

II. Significant Accomplishments

- Ecology letter of 8/28/08 concurred with ORP that retrieval of tank S-112 is complete.

III. Significant Planned Activities in the Next Six Months

- None.

IV. Issues

- None.

Interim Stabilization Consent Decree

I. Near-Term Deliverables:

D-001-00, Complete Interim Stabilization of all 29 SSTs

Due: 09/30/04

Status: Completed on 03/18/04 with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by third amendment to the Consent Decree; these two tanks are undergoing retrieval. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of retrieval operations. Retrieval of S-102 has been impacted by the spill at this tank.

II. Significant Accomplishments:

None.

III. Significant Planned Actions in the Next 6 Months:

Conduct video to quantify amount of free liquid in tank.

IV. Issues

Tank S-102 retrieval not completed by milestone M-45-05A date of March 31, 2007. The spill at S-102 will delay completion of this milestone.

In Tank Characterization and Summary

For the period from September 1 – September 30, 2008:

I. Accomplishments:

- Completed tank 241-C-110 vapor samples on September 22, 2008.
- Completed the data review (data report RPP-RPT-37658) on September 30, 2008, for the sampling event in 241-AY-101.

II. Planned Action within the next Six Months:

- Tank Sampling
  - Tank 241-AZ-102 liquid grab samples scheduled for November 2008.
  - Tank 241-AP-107 liquid grab samples scheduled for November 2008.
  - Tank 241-AW-106 liquid grab samples scheduled for October 2008.
  - Tank 241-AN-103 core samples scheduled for March 2009.

- BBI Updates
  - Eight tank updates for the fourth quarter of FY 2008 and will be published in TWINS by October 10, 2008.
  - Eight tank updates are planned for the first quarter of FY 2009.

- DQOs
  - Complete Evaporator DQO, Rev. 5 in December 2008.
  - Complete SST Component Closure DQO, Rev. 4 in December 2008.

III. Issues:

- None.

Milestone M-47-00, Complete Work Necessary to Support Acquisition and Phase I Operations of Hanford Site High-Level Radioactive Waste Treatment, Storage, and Disposal Facilities

I. Near-Term Deliverables:

- **M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank**
  Due: 03/31/09
  Status: Will Be Missed. Pending path forward with Ecology for renegotiation of new milestone commitments.

- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018**
  Due: 06/30/10
  Status: Negotiations are not yet underway.

II. Significant Accomplishments:

- None.

III. Significant Planned Actions in the Next Six Months:

- None.

IV. Near-term Actions Needed by DOE or Ecology:

- None.

V. Issues:

- Nothing to report.

242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out).

EVAPORATOR CAMPAIGNS

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY08	08-CR	None	(AW-102/ AP-104)	A Cold Run to complete 242-A monitoring and control system (MCS) upgrades and equipment testing, and personnel training is underway. Flush water will be discharged to either AP-104 or AW-102.
FY09	09-01 (10-01)	AP-101/AP-105	AP-104	Previously planned as 08-01 (an acceleration of the 10-01 campaign into FY08), this campaign has been deferred into February/March 2009 and will be performed as 09-01. This deferral is required to support the safe and orderly resumption of operations under the new Tank Operation Contract, and implementation of a new contract baseline.
FY09	09-02	AP-101/AP-105	AP-104/ AP-101	Previously planned as 08-02 (an acceleration of a planned FY09 campaign into FY08), this campaign has been deferred into March/April 2009 and will be performed as 09-02 immediately following 09-01. This deferral is required to support the safe and orderly resumption of operations under the new Tank Operation Contract, and implementation of a new contract baseline.
FY10	010-01	AW-106	AP-101	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.
FY10	01002	AP-104	AP-101/ AP-107	Detailed planning for FY10 and outyear campaigns subject to retrieval activities and Tank Operations Contractor commitments and requirements. Forecast FY10 campaigns are based on preliminary planning associated with blending AZ-102.

Milestone M-90-00, Complete Acquisition of New Facilities, Modifications of Existing facilities, and/or Modifications of Planned Facilities, as Necessary for Storage of Hanford Site Immobilized High Level Waste (IHLW), Immobilized Low Activity Waste (ILAW), and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications

I. Near-Term Deliverables:

- **M-90-10, Ready to Accept Placement of ILAW Waste in ILAW Disposal Facility**
  Due: 8/31/08
  Status: Complete.

- **M-90-11, Complete Canister Storage Facility Construction**
  Due: 8/31/10
  Status: To Be Missed. To be renegotiated to align with WTP schedule.

II. Significant Accomplishments:

- None to report.

III. Significant Planned Actions in the Next Six Months:

- Complete a survey in Fall 2008 to determine survival rate of sagebrush planted to date and determine delta to meet 60% survival required by the Mitigation Action Plan – Fall 2008.

IV. Issues

The IDF has been transferred to DOE RL and the Central Plateau Remediation contractor effective October 1, 2008. Future updates will be provided by DOE RL.

Milestone M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes

I. Near-Term Deliverables:

- **M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes**
  Due: 12/31/2028
  Status: To Be Missed.

- **M-62-00A, Complete WTP Pretreatment Processing and Vitrification of Hanford HLW and LAW Tank Wastes**
  Due: 02/28/2018
  Status: To Be Missed.

- **M-62-01P, Submit Semi-Annual Project Compliance Report**
  Due: 01/31/2008
  Status: Complete.

- **M-62-01Q, Submit Semi-Annual Project Compliance Report**
  Due: 07/31/2008
  Status: Complete.

- **M-62-07B, Complete Assembly of Low Activity Waste Vitrification Facility Melter #1 So That It Is Ready for Transport and Installation in the LAW Vitrification Building (BNI Baseline Schedule Activity 4DL321A200 as Part of DOE Contract No. DEAC27-01RV14136), and Complete Schedule Activity ID 4DH46102A2 – Move #1 Melter into the High Level Waste Vitrification Facility**
  Due: 12/31/2007
  Status: Missed.

- **M-62-08, Submittal of Hanford Tank Waste Supplement Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline and Draft Negotiations Agreement in Principle**
  Due: 06/30/2006
  Status: Missed – Insufficient information to compare technologies due to delays in funding for the Demonstration Bulk Vitrification System (DBVS) and lack of WTP cost and schedule information.

- **M-62-09, Start Cold Commissioning – Waste Treatment Plant**
  Due: 02/28/2009
  Status: To Be Missed (based on current DOE Baseline planning).

- **M-62-10, Complete Hot Commissioning – Waste Treatment Plant**
  Due: 01/31/2011
  Status: To Be Missed (based on current DOE Baseline planning).

- **M-62-11, Submit a Final Hanford Tank Waste Treatment Baseline**
  Due: 06/30/2007
  Status: Missed.

II. Significant Accomplishments:

- None to report.

III. Significant Planned Actions in the Next Six Months:

- Preliminary studies to support the "Early LAW" initiative were completed and the results have been reported to DOE ORP for evaluation. The studies considered both in- and ex-tank alternatives. Results should be made available by October 31, 2008, when DOE completes its review of the reports.

IV. Issues:

- None.

Hanford Waste Treatment and Immobilization Plant (WTP) Project

Waste Treatment and Immobilization Plant

There are 1,624 people assigned to the WTP construction site (all facilities); 993 manual and 631 non-manual. Overall project percent complete is 45%. Design and engineering is 74% complete and construction is 38% complete.

Fiscal year financial expenditures to date are $655 million that, when combined with approved baseline change proposals (BCP) implemented this year, result in a forecasted spend of $722 million.

Cumulative fiscal year-to-date earned value performance for the project is shown in the table below.

	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08
BCWS	48,396	93,184	135,015	178,633	259,849	315,441	369,217	405,324	465,138	525,929	605,932
BCWP	48,645	95,247	134,615	177,802	255,241	303,880	363,561	396,581	448,239	499,924	567,226
ACWP	54,226	111,143	160,591	208,495	283,264	341,823	409,221	458,958	516,307	576,985	661,088

The WTP has a cumulative unfavorable cost variance (CV) of $68.2 million and unfavorable schedule variance (SV) of $69.2 million. Cost and schedule performance continues to challenge project objectives. Poor engineering performance is impacting procurement and construction schedules and emergent work is driving inefficiencies in planned (scheduled) work. Technical issues have also contributed to declining cost and schedule performance.

Initiatives to identify process improvements and recovery actions are continuing. An engineering causal analysis study (directed by ORP) and associated engineering performance recovery plan was completed in June 2008. Initiatives identified as a result of the causal analysis include development of a focused equipment group to maintain a sharper focus on key procurements, additional senior engineering talent to focus on production, and incorporation of all unplanned work into the schedule (expected to be complete in October 2008).

DOE and the Office of Civilian Radioactive Waste Management (OCRWM) conducted the first phase of a three-phase oversight review to qualify the WTP contractor's, (BNI) and ORP's High-Level Waste (HLW) Quality Assurance (QA) programs. The review addressed QA programs, technical activities, and software quality assurance (SQA), resulting in eight recommendations and two noteworthy practices. The two noteworthy practices were (1) BNI has significantly improved its SQA program and (2) BNI uses an effective plateau training program to track and control training.

Overall, the OCRWM team concluded that BNI is ready to be assessed under Phase II of the OCRWM certification process during January/February 2009. OCRWM concluded they are confident with ORP's current QA approach and should be ready for a Phase I (B) assessment when the program is issued and implemented.

In December 2007, Critical Decision (CD)-0 was approved for ORP to evaluate pretreatment alternatives supporting early startup of the WTP Low-Activity Waste (LAW) Facility. Cross-flow filtration and ion exchange was the original technology down-select. Since the original alternatives analysis, ORP has chosen to evaluate additional in tank pretreatment methods that would not require the construction of capital facilities. The evaluation includes in-tank pretreatment methods such as the in-riser ion exchange and spin-tek filters that could be used to supply waste to the WTP LAW Facility for hot commissioning prior to WTP Pretreatment (PT) Facility startup. The current evaluation includes feasibility of safety basis controls implementation.

Beginning in 2007, DOE ORP, in concert with the Vitreous State Laboratory of the Catholic University of America, devised and planned a multi-year glass formulation and process development effort to address the life-cycle mission of the WTP. As of August 2008, high-level waste glass has nearly doubled (with objective evidence that higher waste loadings are possible); waste loading is the expression for the amount of waste incorporated in the vitrified waste form. Production of glass rates have gone from approximately 500 Kg/m^2/day to as much as 1,500 Kg/m^2/day, while aluminum loading (long recognized as playing a role in rate reduction) has also climbed. The waste loading improvements from this work have the potential to significantly reduce the WTP canister count by up to 6,000 and reduce the amount of supplemental treatment required for the LAW portion.

The U.S. Nuclear Regulatory Commission (NRC) held a public meeting in Richland, Washington, to discuss their report and conclusions and allow for public response. The report, documenting their review of DOE's regulatory processes for construction of the WTP, was issued to the public on August 11, 2008, and posted on the NRC external website. There were very few questions from stakeholders and others at the meeting that focused on NRC's review scope and resulting report. There were no questions on NRC's recommendations or DOE's response to the report or its recommendations.

To date, the Broad Based Review (BBR) has completed 75% of the approximately 8,000 reviews of requirement/component pairs on the selected systems. Of these reviews, roughly 6% resulted in a "requirement not met" finding. The review phase of the BBR is scheduled to be complete by September 30, 2008, followed by two to three months of issues resolution and report finalization. The final report is scheduled to be published in December 2008. The BBR review spans seven system designs (Low-Activity Waste Facility Melter Off-gas [primary and secondary systems]; High-Level Waste [HLW] Facility Melter Off-gas; HLW Process Vessel Vent, Medium Voltage Electrical, Plant Service Air, and Feed Receipt Process systems) and four commodity types (piping, valves, vessels, and melters). The goal of the review is to determine if top-level contract, permit, and safety basis requirements have been implemented in procurement and construction design documents. The team is comprised of approximately 45 engineers and quality professionals with previous nuclear experience, including two DOE personnel.

A meeting was held in September 2008 between DOE ORP and DOE Office of Engineering and Construction Management (OECM) to resolve ORP's comments on the OECM report that addresses its management review of ORP and the WTP Contractor, BNI. The OECM review focused on concerns over continued monitoring of the WTP Project, the actions ORP has taken to resolve recommendations from prior external reviews, and BNI's incorporation of corrective actions resulting from the Earned Value Management System (EVMS) certification reviews. The OECM review also assessed recommendations of all calendar year 2006 reviews and whether or not they have been satisfactorily addressed and management processes are effective and functioning. OECM conducted its review in June 2008 and submitted a draft report for review on July 30, 2008.

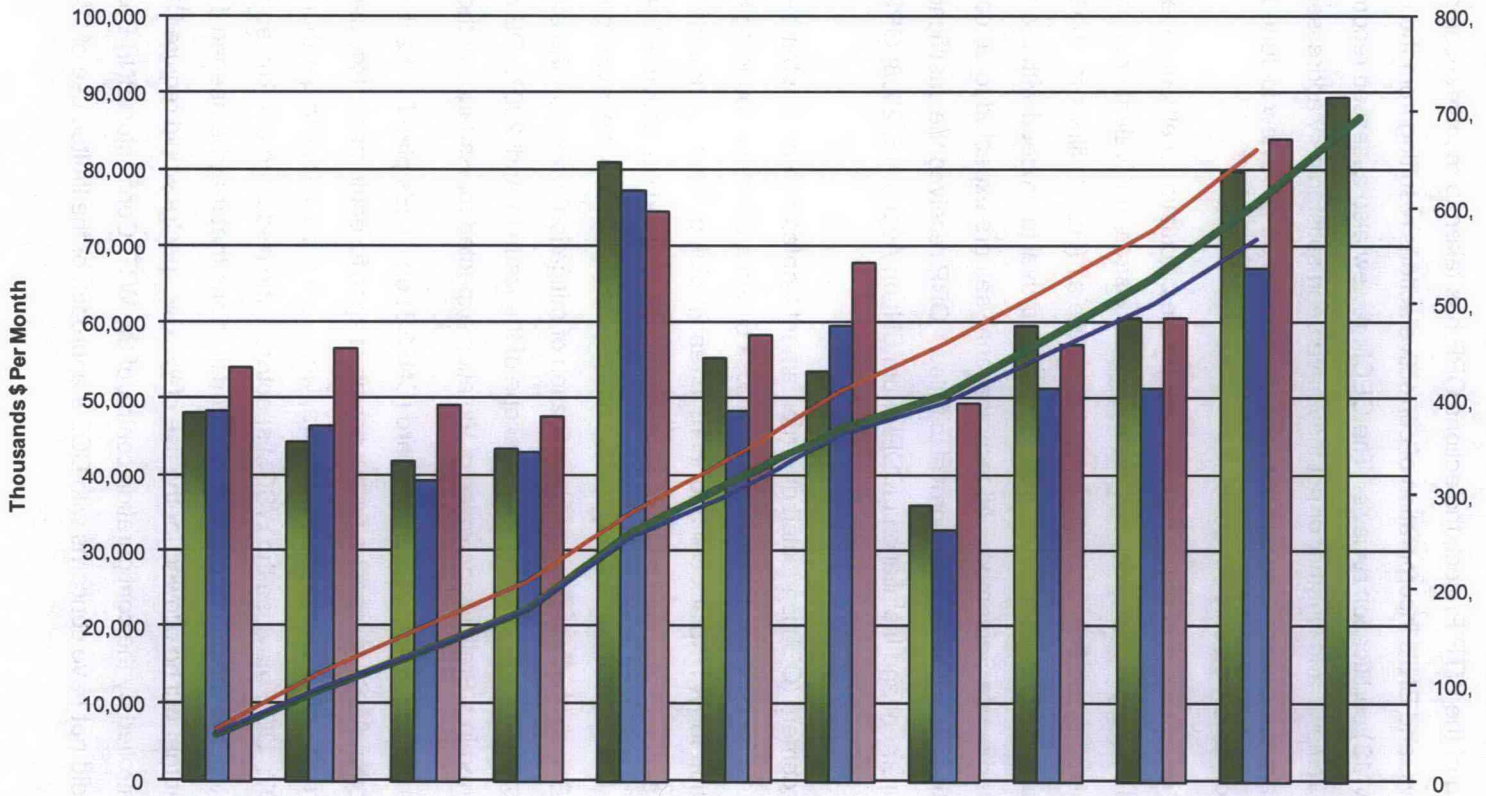
ORP is making progress evaluating and providing feedback on the calculation methodologies that BNI will use to conduct the actual analytical calculation necessary to demonstrate equivalent or superior fire protection features in protecting the final high-efficiency particulate air (HEPA) filters for the WTP. Fire Hazards Analysis methodologies have received ORP informal approval to proceed with the analysis; formal approval is expected in late September. All technical analyses are expected to be complete by February 27, 2009, with final PT/HLW ABAR approval to follow. ORP received the Justification for Continued Design, Procurement and Installation (JCDPI) from BNI on August 15, 2008; ORP is reviewing the JCDPI with expected response to BNI by October 10, 2008.

The DOE, Office of Enforcement (OE) conducted an Enforcement Conference on September 16, 2008, in Richland, Washington. The conference was held to discuss circumstances surrounding BNI procurement and fabrication for WTP black cell and "hard to reach" piping. During the conference, BNI presented the corrective actions they have taken to date and future planned corrective actions to prevent recurrence of this issue. BNI did not contest any of the conclusions reached in the investigation report dated August 18, 2008. BNI did however request "application of mitigation" based on the extensive corrective actions taken since the discovery of the full scope of the issue in April 2007. OE results of the conference will be published in a Preliminary Notice of Violation expected for issuance in the near future.

DOE briefed the Defense Nuclear Facilities Safety Board (DNFSB) on DOE's plan for the limited use of WTP Specific Ground Motion (WSGM) spectra for the design of specific equipment. Revised ground motion (RGM) spectra are the WTP Design Basis spectra, which are significantly larger than the WSGM spectra developed in 2007. DOE may use the WSGM spectra for the re-design of a limited number of equipment and other systems to mitigate the significant modifications that may be needed if RGM spectra are used. The equipment that will be allowed for the use of WSGM spectra would require DOE approval and will be listed and controlled by the configuration control of the WTP Contractor (BNI) Basis of Design document. The DNFSB did not have concerns with DOE's approach of the limited use of WSGM spectra.

Total Project - WTP Fiscal Year to Date Performance ($ In Thousands)

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	48,396	44,788	41,831	43,618	81,216	55,591	53,776	36,107	59,814	60,791	80,003	89,544
Mthly Perf (BCWP)	48,646	46,602	39,368	43,187	77,439	48,637	59,681	33,020	51,658	51,685	67,302	
Mthly Actuals (ACWP)	54,226	56,917	49,448	47,904	74,769	58,559	67,938	49,737	57,349	60,678	84,103	
FY 08 TD Plan (BCWS)	48,396	93,184	135,016	178,634	259,849	315,441	369,216	405,323	465,137	525,928	605,930	695,474
FY 08 TD Perf (BCWP)	48,646	95,248	134,616	177,804	255,242	303,880	363,561	396,581	448,239	499,924	567,226	
FY 08 TD Actuals (ACWP)	54,226	111,143	160,591	208,495	283,264	341,823	409,760	459,497	516,846	577,524	661,627	

Pretreatment (PT) Facility

The PT Facility will separate radioactive tank waste into high-level waste (HLW) and low-activity waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Facility construction began November 2002 with a scheduled construction completion date of October 2014. Currently, overall percent complete is 38%, design is 66% complete, and construction is 25% complete.

Engineering performance continues to fall below expectations, which is leading to delays in procurement and construction activities. BNI has been developing an engineering recovery plan for several months and is implementing it in their scheduling tools; BNI will present their plan to DOE in the near future. Mechanical Systems has issued committed revised drawings for two-thirds of the PT Facility piping and instrumentation diagrams (P&ID); the group is striving to issue committed drawings for all P&IDs by the end of October. This will provide Plant Design with the information needed to produce the piping isometric drawings required for the facility. Both of these organizations are experiencing productivity challenges that BNI management is addressing. Engineering accomplishments this month include approval of calculations to support completion of committed system design for chilled water, lag storage, and feed blending process systems. Other activities include the issuance of datasheets for pressure gauges, 3-D model change requests, and isometric drawings released from RGM holds. Pipe support and stress calculation packages were also completed for the plant service air systems racks.

Overall Construction performance improved in September with concrete-related work, structural steel, and equipment installation leading the way. Expectations for pipe installation were not met due to the complexity of installing drain lines in the floor slabs. Accomplishments in September included the placement of 400 cubic yards of concrete for walls at the +56' elevation. Crews also successfully placed concrete for wall 2-73, which includes the frames for the lower hot cell shield door. At the 28' elevation, workers are routing the temporary propane gas system, as well as erecting structural steel on the east and southeast of the facility. At the 56' elevation, crews are placing rebar, commodities, and forms for fourth lift walls on the east end, and setting Q-decking, rebar, and commodities for slabs in the south area. Construction forces are making progress installing rebar and embeds in the wall above the hot cell shield doors; installing ring beams, grillage, and liner plate in black cells on the south side of the building; and prefabricating rebar curtains on the ground north of the facility for walls at the 56' elevation.

To date, 23 of 31 issues identified by the External Flowsheet Review Team (EFRT) have been closed. An additional three issues (M-1, Pipe Plugging; M-2, Erosion of Mixing Vessels; and M-6, Process Operating Limits Not Completely Defined) are planned for closure by the end of FY 2008.

The Pretreatment Engineering Platform (PEP), which is being developed as part of EFRT issue M12, Undemonstrated Leaching Process, provides the equipment needed to perform a 1:4.5 scale test of the WTP ultrafiltration system to validate the caustic and oxidative leaching processes, equipment

performance, and system capacity. BNI and Pacific Northwest National Laboratory (PNNL) are making progress. Crews have initiated integrated water testing, which is intended to demonstrate integrated operational capability of the PEP and performance of the operations and test team. Simulant functional testing will follow integrated water testing toward the end of October. PNNL is performing a management readiness assessment of PEP testing and operation. In parallel, BNI and ORP teams are assessing the adequacy of the PNNL readiness assessment. Phase 1 testing will begin by the end of October/early November 2008; testing is scheduled to be complete in December.

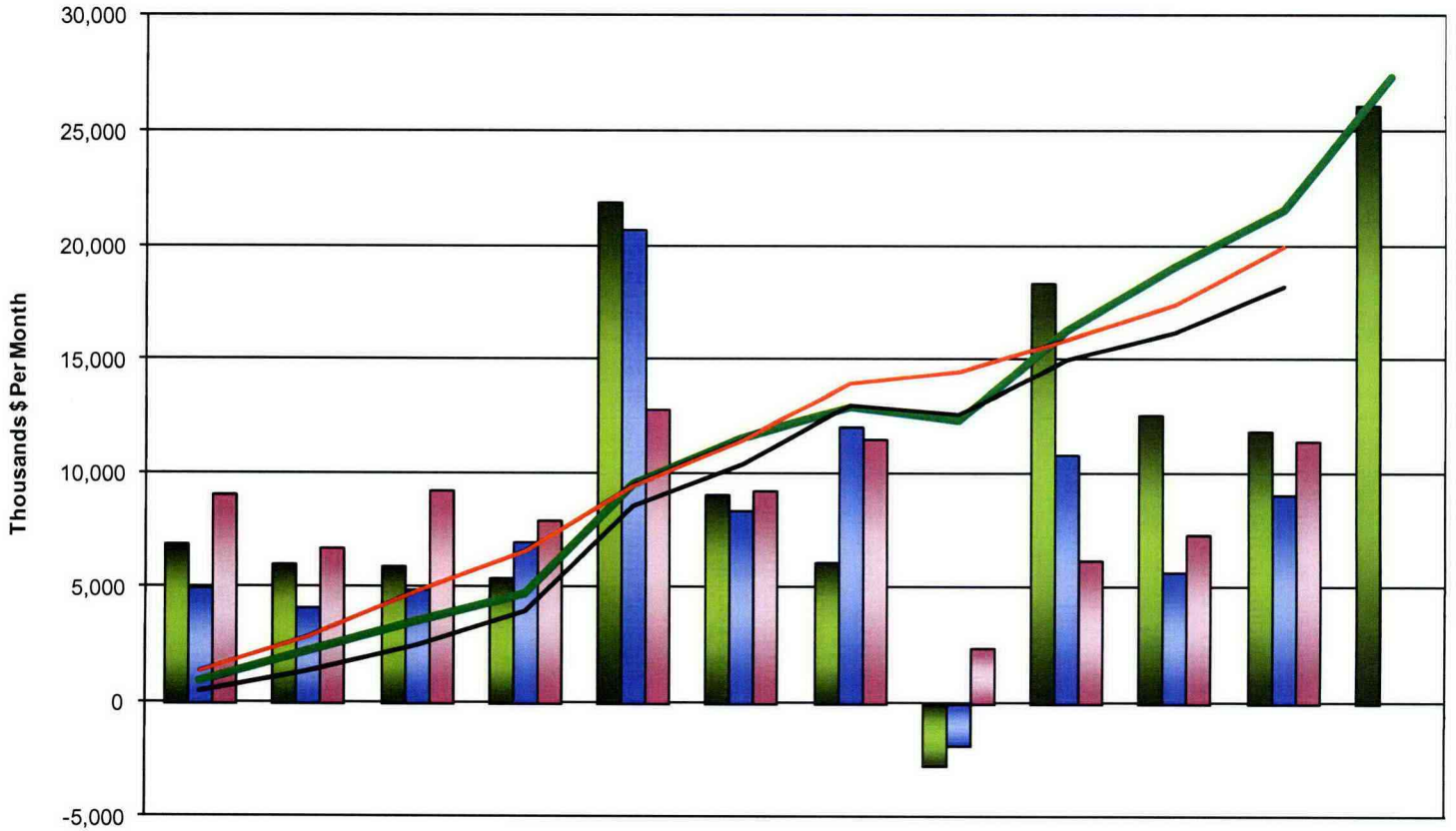
As discussed, WTP presented the results of studies associated with the WSGM spectra to the DNFSB. WTP plans to selectively use the WSGM spectra for certain PT vessels, cranes, jumpers, etc., that require significant modifications if required to be designed to the current design basis. DOE also approved an associated Authorization Basis Amendment Request BNI submitted. Modification of the PT Safety Requirements Document (SRD) is underway.

The following table provides a status of near-term gatepost milestones for the PT Facility.

PRETREATMENT FACILITY - 90 Day Outlook		
Milestone/Activity	**Target Date**	**Status**
Complete Installation of Structural Steel (56' elevation, SW Side)	11/08	11/08
Issue IFC Drawings for PSA Rack	11/08	12/08
Complete Third Lift Concrete Walls	12/08	11/08
Complete Wall Concrete Placements to 56' Elevation	12/08	12/08

Pretreatment - Fiscal Year to Date Performance ($ In Thousands)

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	6,935	6,054	6,010	5,475	22,025	9,118	6,159	-2,747	18,422	12,575	11,888	26,166
Mthly Perf (BCWP)	5,028	4,153	4,908	6,993	20,744	8,410	12,095	-1,863	10,866	5,699	9,105	
Mthly Actuals (ACWP)	9,100	6,756	9,297	7,989	12,875	9,248	11,510	2,406	6,260	7,368	11,483	
FYTD Plan (BCWS)	6,935	12,990	19,000	24,475	46,500	55,617	61,776	59,030	77,452	90,027	101,915	128,081
FYTD Perf (BCWP)	5,028	9,182	14,090	21,083	41,827	50,237	62,332	60,469	71,336	77,035	86,140	
FYTD Actuals (ACWP)	9,100	15,856	25,153	33,142	46,017	55,266	66,776	69,181	75,442	82,809	94,292	

High-Level Waste (HLW) Facility

Construction and design activities are progressing at the HLW Facility. HLW design and construction completions are 85% and 20%, respectively. Overall, HLW Facility completion is 42%.

Construction forces at the -21' elevation continue coating the drum transfer tunnel and structural steel connections; installing supports for electrical trays and piping systems; erecting structural steel and wall supports; and working on the bogie rail beams in the cask handling tunnel. At the 0' elevation, crews successfully placed concrete for slabs 1012 and 1013 and wall 1139 at the north central perimeter. Crews continue to install forms and commodities for various walls and slabs, erect structural steel and wall supports, and apply coating in the west annex. At the +14' elevation, crews placed 185 cubic yards of concrete for placement of slab 2003 (completion of a gatepost milestone). Workers continue to erect structural steel and install commodities and forms for slabs at the west end. Crews placed 47 cubic yards of concrete for wall 1131 on the east side of Melter Cave 1. Subcontractors continue applying coatings in the drum transfer tunnel, working on the ducting system, and installing fire water piping.

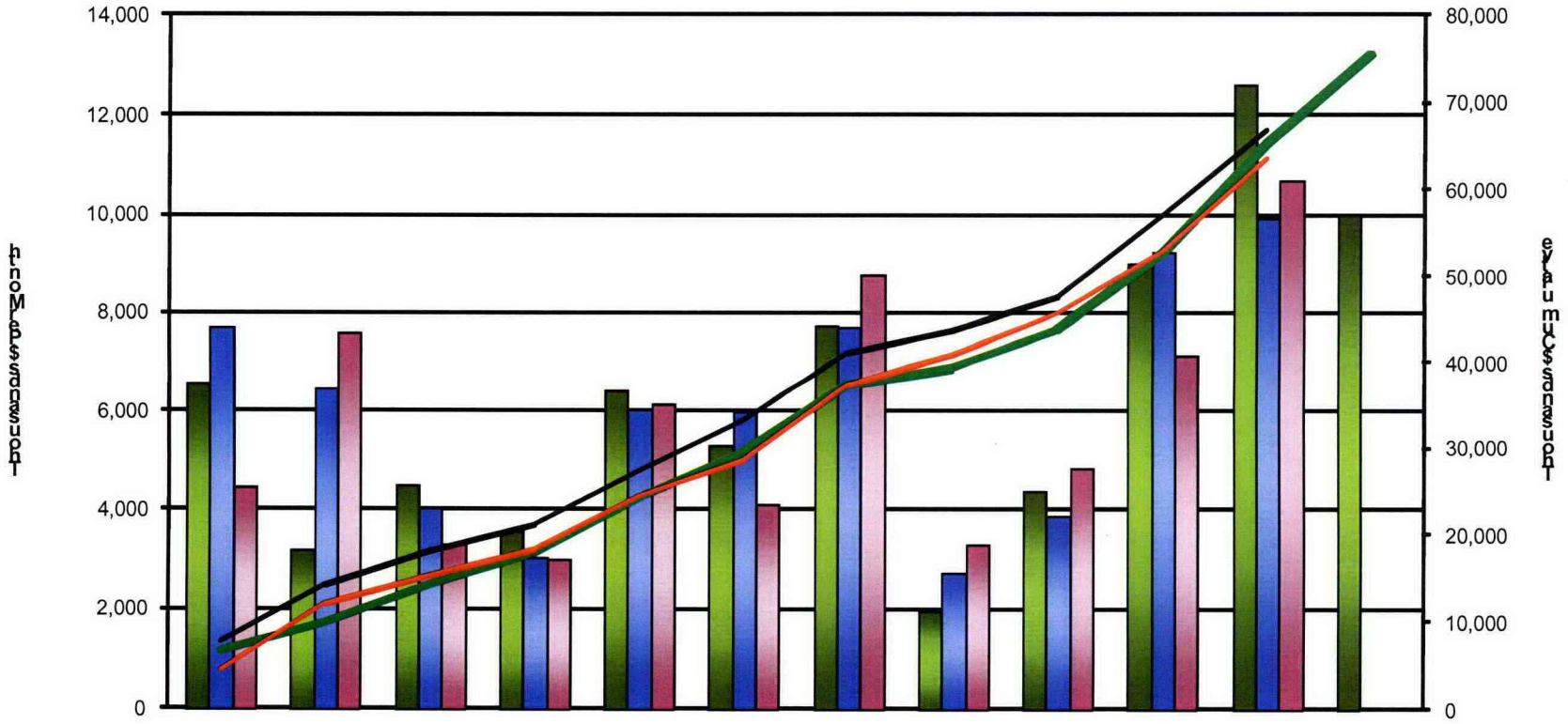
Engineering activities include the issuance of numerous engineering calculation change notices (to clarify anchor bolt, clip, stud, and column dimensions and details), drawing change notices (to change weld and plate sizes and seismic categories), isometric drawings, sketches, stress and support calculations (C5 fan pressure drop calculation), communication equipment datasheets and specifications, and system block diagrams (high- and low-pressure steam systems). Ten fan coil units were shipped, vendor test plans for back-up breathing service air system and instrument service air system bottles were reviewed, and the factory acceptance test was completed for the Melter Cave Support Handling System decontamination tanks.

The following table provides a status of near-term gatepost milestones for the HLW Facility:

HIGH LEVEL WASTE FACILITY- 90 Day Outlook		
Milestone/Activity	**Target Date**	**Status**
Preliminary RGM Evaluation of Melter	6/08	6/08 A
RGM Evaluation of RLD Vessels	8/08	8/08 A
Safety Systems Requirement Specification-Interlocks C2/C3 Rev.0	8/08	11/08
Erect Structural Steel & Decking Slab 2002 (+14')	9/08	6/08 A
Issued for Construction-Piping Isometrics for Breathing Service Air	11/08	10/08
Place Elevated Slab 2001 (+14') Annex	12/08	7/08 A
Autosampling System Design Complete	12/08	4/09
Install Transfer Bogie Maintenance Crane Steel/Rails	1/09	11/08

High Level Waste - Fiscal Year to Date Performance ($ In Thousands)

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	6,569	3,208	4,498	3,594	6,415	5,310	7,772	1,972	4,387	9,013	12,620	10,031
Mthly Perf (BCWP)	7,740	6,457	4,060	3,074	6,030	5,991	7,709	2,762	3,888	9,252	9,931	
Mthly Actuals (ACWP)	4,466	7,623	3,309	3,015	6,156	4,130	8,786	3,347	4,864	7,147	10,726	
FYTD Plan (BCWS)	6,569	9,777	14,275	17,869	24,284	29,594	37,366	39,337	43,725	52,737	65,357	75,388
FYTD Perf (BCWP)	7,740	14,197	18,257	21,331	27,362	33,353	41,061	43,824	47,711	56,963	66,894	
FYTD Actuals (ACWP)	4,466	12,089	15,399	18,413	24,569	28,699	37,486	40,833	45,697	52,844	63,570	

Low-Activity Waste (LAW) Facility

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel containers that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 70%, design is 94%, and construction is 62%.

Construction activities during September included placement of grout under melter #1 rail outside the facility and completion of decking installation on the export bay on the +48' elevation. The motor control center for the export bay bridge crane was also set, which will allow crews to finish installing metal decking. Crews also finished abrasive blasting the upper level structural steel connections in the annex and have started painting the connections. Ongoing construction activities include installation of metal stairs providing access to the buffer store maintenance crane platform; frames around the personnel access doors into the pour caves on the -21' elevation in preparation for insulation; and walls and reinforcement bar and embedments in the Breathing Service Air System. Crews continue to install grillage clips for the attachment of insulation in the pour caves, fire sprinkler piping in the annex on the first floor, and ductwork on the +48' elevation. Fireproofing repairs on the +3' and +28' elevations are ongoing. Electricians are installing conduit on the -21' and +3' elevations and motor control centers on the +3' elevation. Work continues on the Consumable Import Station in the lower melter gallery area.

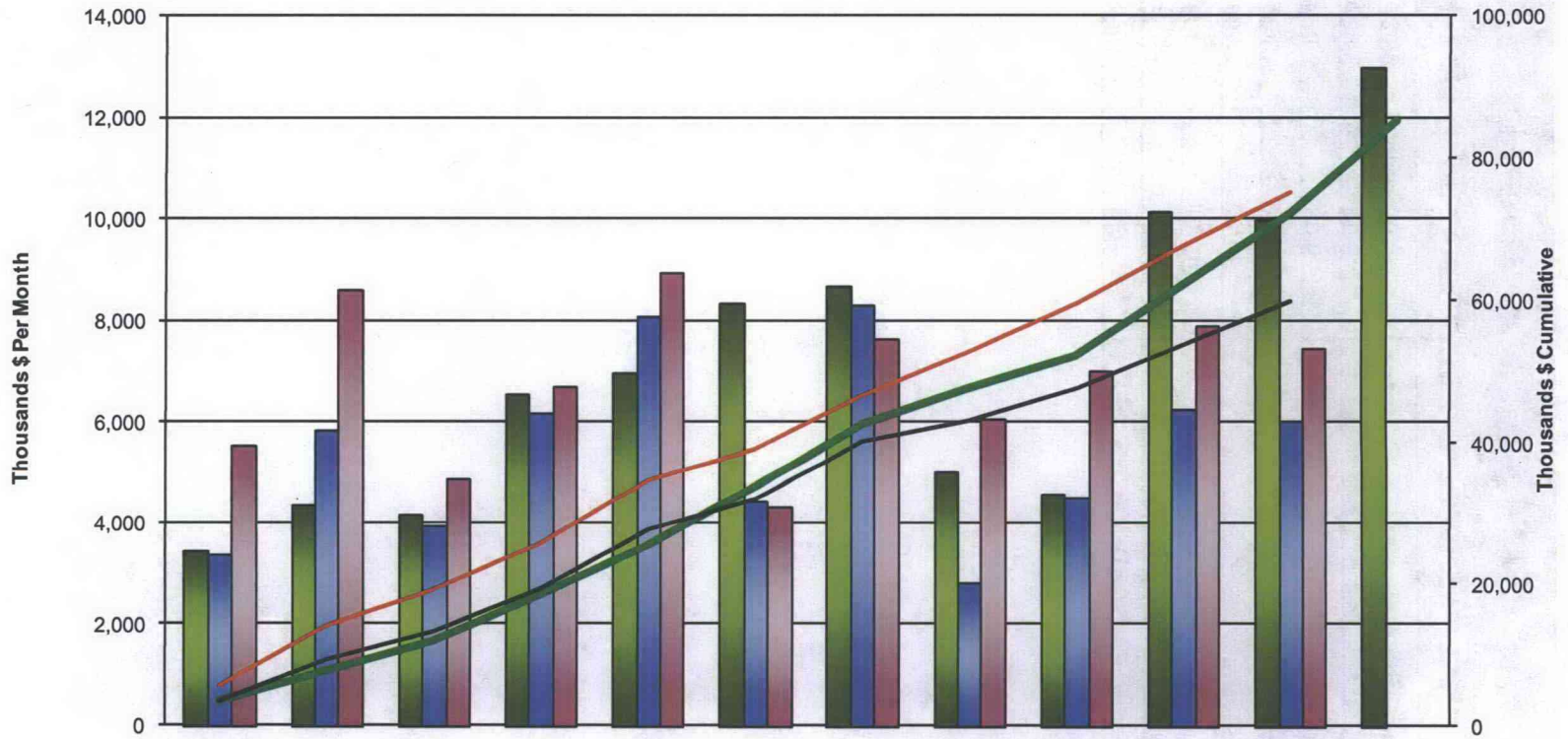
Engineering and procurement activities during September included factory acceptance testing for the remote input/output enclosures, and pre-factory acceptance testing for the CO_2 pelletizers. Calculations were issued for the Chilled Water System and Demineralized Water System orifice plates. In addition, over 30 system logic diagrams were issued including the primary offgas, offgas/vessel vent, and melter process. System functional diagrams for the melter process system, 8 heating, ventilation, and air-conditioning (HVAC) supports, 11 isometric drawings, datasheets to support procurement of 7 control valves, 6 temperature transmitters, 5 flow transmitters, and 2 differential pressure transmitter were also issued. The installation manual was issued for the pour cooling cave panels, which will allow construction installation activities to proceed.

The following table depicts near-term gatepost milestones for the LAW Facility.

LOW ACTIVITY WASTE FACILITY- 90 Day Outlook		
Milestone/Activity	**Target Date**	**Status**
Annex Facility "Closed In"	7/08	6/08 A
Deliver Repaired RLD Process Bulge	8/08	8/08A
Civil/Structural Design Complete	9/08	7/08A
Electrical Design Complete	9/08	9/08A
Deliver Melter Off-Gas Spools 1B&1C	10/08	10/08
Complete Remaining Iso Design	12/08	12/08
Deliver Melter #1 Base	12/08	11/08
Deliver Melter Power Supply Equipment PA #5A	9/08	12/08
Install Roof and Wall Liner Plate, PA#3C&D	1/09	1/09

Low Activity Waste Fiscal Year to Date Performance ($ In Thousands)

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	3,471	4,358	4,163	6,565	6,976	8,351	8,707	5,039	4,593	10,136	9,989	12,995
Mthly Perf (BCWP)	3,408	5,851	3,964	6,207	8,115	4,426	8,309	2,829	4,514	6,260	6,052	
Mthly Actuals (ACWP)	5,554	8,632	4,887	6,713	8,973	4,318	7,654	6,081	7,005	7,919	7,451	
FYTD Plan (BCWS)	3,471	7,830	11,993	18,558	25,533	33,885	42,592	47,631	52,224	62,360	72,349	85,344
FYTD Perf (BCWP)	3,408	9,259	13,224	19,431	27,546	31,972	40,281	43,110	47,624	53,884	59,936	
FYTD Actuals (ACWP)	5,554	14,186	19,073	25,786	34,759	39,077	46,730	52,811	59,816	67,735	75,186	

Analytical Laboratory (LAB)

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 42%, design is 90%, and construction is 47%.

Pipefitters on the +17' elevation continue to work on steam piping that will supply low-pressure steam for use in HVAC steam heating coils and humidifiers. Ironworkers placed the stairway on the southwest side of the hot cell, and continue to adjust and secure in place. Construction forces continue to erect metal stud partition walls; the subcontractor continues to install stack connections through the roof penetrations. Crews are installing trolley trough and partition walls in the hot cell; cable tray supports east of the hot cell; piping; ductwork; and firewater piping. Carpenters are preparing formwork for future concrete transformer pads on the west side of the LAB. Construction forces finished placing "Q" grout around shielding on the south side of the hot cell and installing stack ductwork through the roof. Millwrights continue to install the monorail in the C-3 maintenance area.

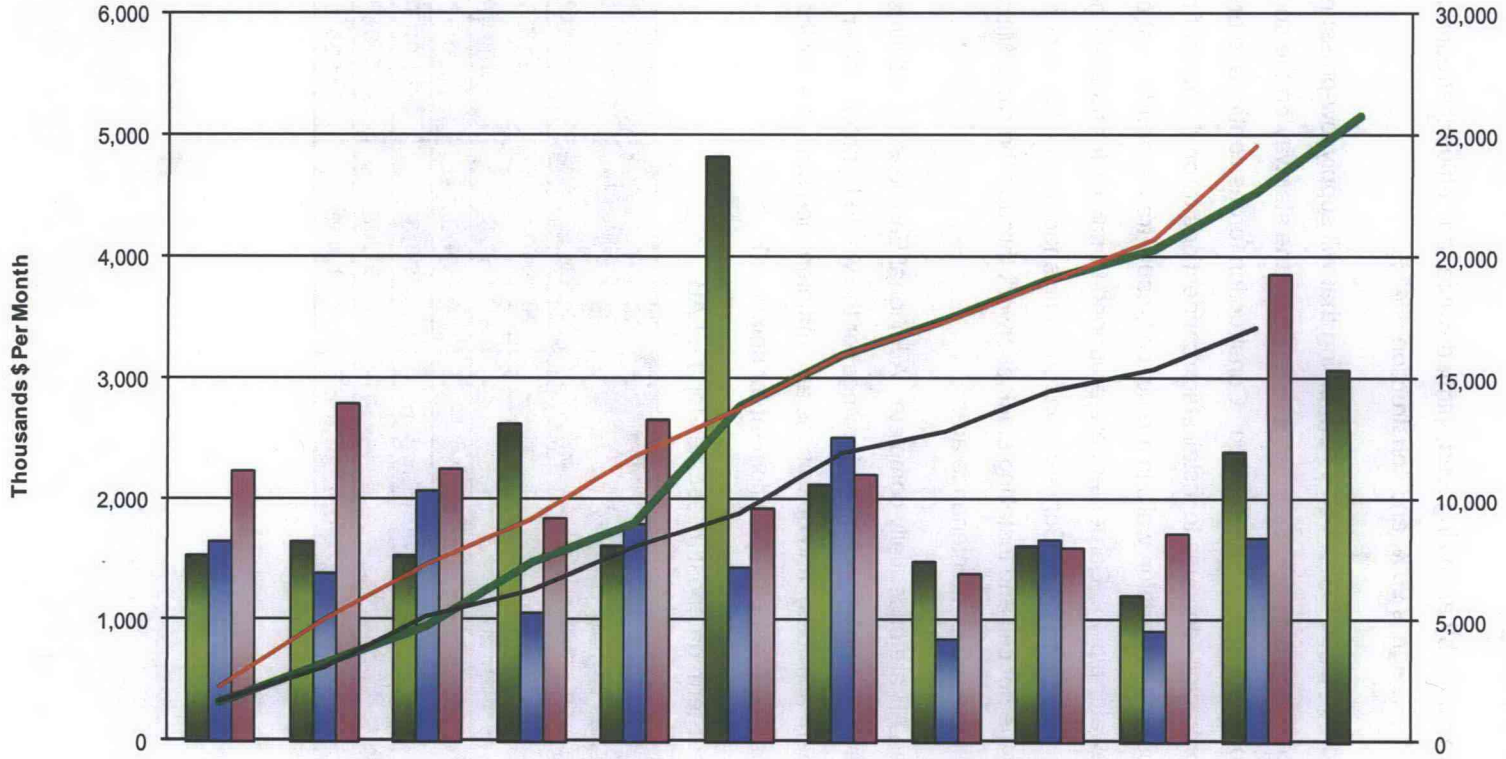
Title II design activities for the LAB are essentially complete. Additional Engineering activities include the approval and issuance of over 100 support drawings, drawings for the waste transfer system (needed to support fabrication and shipment activities), and operations and maintenance manuals for the cell-to-cell trolley system (needed to release the remaining equipment for shipment).

The following table depicts near-term gatepost milestones for the LAB:

ANALYTICAL LABORATORY- 90 Day Outlook		
Milestone/Activity	**Target Date**	**Status**
Deliver Master Slave Manipulators	4/08	11/08
Complete Structural Steel Fireproofing	5/08	5/08 A
Complete Laser Ablation Site Accept Testing	7/08	7/08 A
Complete 65% HVAC QL Ducts & Support Installation	9/08	9/08 A
Complete C5 Tank Pit Elevated Concrete	11/08	2/09
Complete 55% HVAC CM Duct and Support Installation	12/08	12/08

Analytical Laboratory - Fiscal Year to Date Performance ($ In Thousands)

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	1,534	1,659	1,545	2,643	1,627	4,834	2,139	1,491	1,629	1,219	2,413	3,084
Mthly Perf (BCWP)	1,654	1,395	2,079	1,066	1,804	1,446	2,520	849	1,666	923	1,692	
Mthly Actuals (ACWP)	2,253	2,796	2,269	1,854	2,667	1,937	2,216	1,394	1,614	1,720	3,877	
FYTD Plan (BCWS)	1,534	3,194	4,739	7,381	9,008	13,842	15,980	17,471	19,100	20,319	22,732	25,816
FYTD Perf (BCWP)	1,654	3,049	5,127	6,193	7,997	9,443	11,963	12,813	14,479	15,402	17,094	
FYTD Actuals (ACWP)	2,253	5,049	7,317	9,171	11,838	13,775	15,991	17,385	18,999	20,719	24,596	

Balance of Facilities (BOF)

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 50%, design/engineering is 74%, and construction is 64%.

Turnover of the Cathodic Protection System has been pushed out to October 2008, due to incomplete installation of some items as a result of work sequencing of adjacent piping installation, damage to a rectifier lid, and some cabling that needs to be completed. The Cathodic Protection System provides back-up corrosion protection to coatings for the plant service air lines, waste transfer lines between facilities, and the important-to-safety air line. Startup testing will take approximately four months to complete. This is the second BOF system to be turned over. Remaining turnover of systems for the 13 BOF buildings will total approximately 130 systems.

Installation of load cells on weigh hoppers that measure the weight of the glass former materials at the Glass Former Facility, and installation of a temporary propane service starting at a temporary tank southwest of the steam plant servicing the PT and HLW Facilities is ongoing. Other construction activities include preparation of concrete formwork for a pipe support and a pad for an air-handling unit on the east end of the Water Treatment Building and excavation with vacuum trucks at different locations, including temporary power service to the temporary propane tank west of the Steam Plant Facility, from the temporary propane tank toward the HLW and PT Facilities, and at the northeast corner of the LAW Facility for fire service water. Electricians continue to pull cables into conduit in the Chiller Compressor Plant. Crews are working to finish welding hold down clips for the borax storage silo in the Glass Former Facility. Workers completed sectional backfill for Liquid Effluent Retention Facility lines in trench 4D.

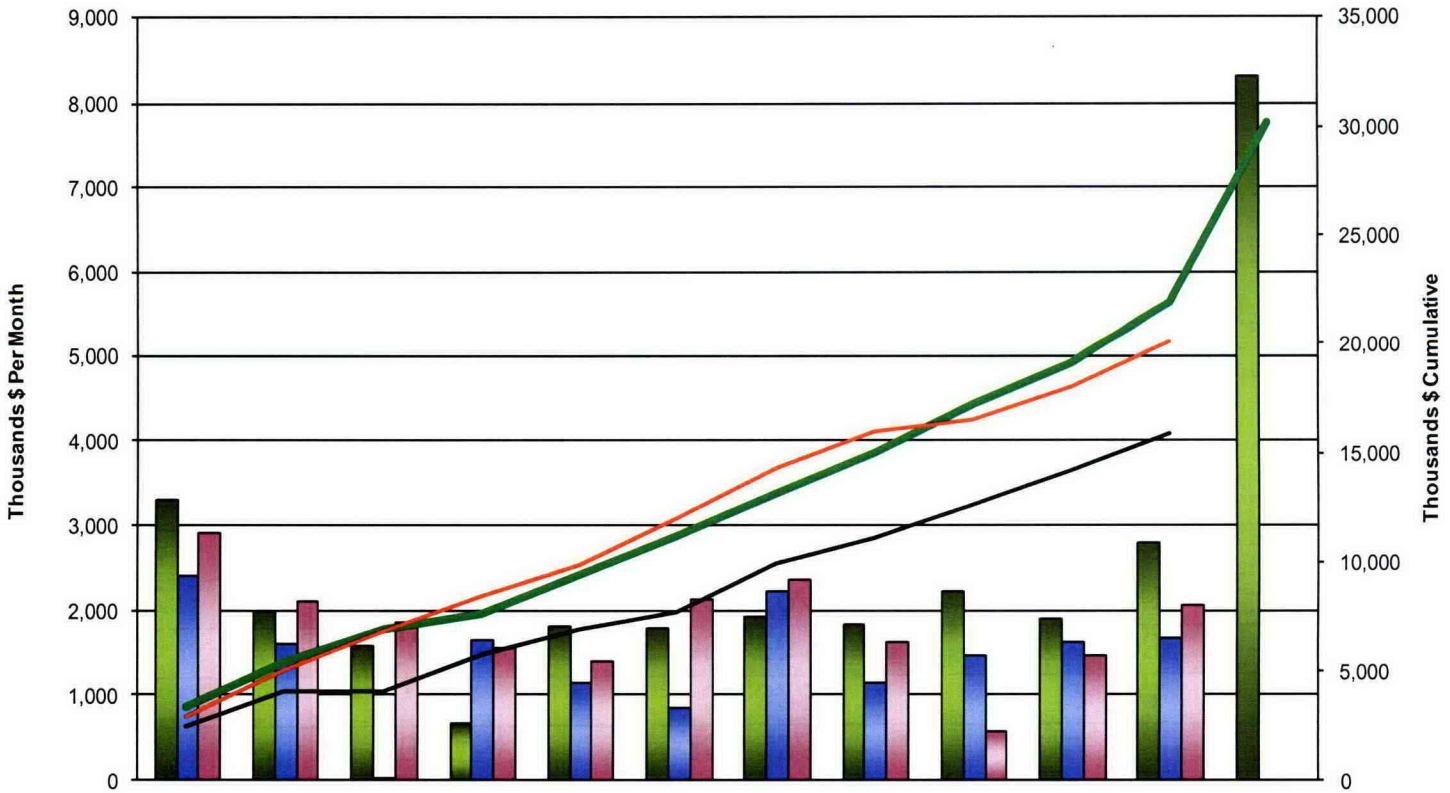
Other activities this month included the issuance of datasheets for modulating control valves, foundation field bus differential pressure transmitters, swirl meters, temperature transmitters, resistance temperature detectors, control valves, and pressure gauges to support procurement activities.

The following table depicts near-term gatepost milestones for the BOF.

BALANCE OF FACILITIES - 90 Day Outlook		
Milestone/Activity	**Target Date**	**Status**
Deliver GFSF Bins, Silos and Steel	5/07	10/08
Complete GFSF Silo/Tanks (17) Sets	5/07	11/08
Issue Rack #5A Pipe Fab Isometrics	5/08	5/08 A
Complete LAW Melter Slab	6/08	1/08 A
Complete Steam Plant Construction	9/08	4/08 A
Complete LAW Melter Slab	6/08	1/08 A
Complete Steam Plant Construction	9/08	4/08 A
Award 4.16KV Emergency Diesel Generator PO	10/07	11/08
Complete 90% Chiller Compressor Pipe Installation	12/08	12/08

Balance of Facilities - Fiscal Year to Date Performance ($ In Thousands)

October 2007 - September 2008



	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08
Mthly Plan (BCWS)	3,305	2,005	1,587	676	1,819	1,792	1,934	1,834	2,223	1,896	2,810	8,321
Mthly Perf (BCWP)	2,408	1,619	20	1,663	1,145	861	2,224	1,162	1,465	1,630	1,683	
Mthly Actuals (ACWP)	2,904	2,102	1,854	1,564	1,406	2,127	2,366	1,629	572	1,479	2,070	
FYTD Plan (BCWS)	3,305	5,311	6,898	7,574	9,393	11,185	13,119	14,953	17,176	19,072	21,882	30,203
FYTD Perf (BCWP)	2,408	4,028	4,048	5,711	6,856	7,717	9,941	11,102	12,568	14,198	15,881	
FYTD Actuals (ACWP)	2,904	5,006	6,860	8,424	9,830	11,957	14,322	15,951	16,524	18,003	20,073	

KEY COMMODITY QUANTITY PROGRESS				
Commodity	Unit of Measure	Current Planned at Completion Quantity	Installed-to-Date (August 2008)	Percent Complete
Concrete	1,000 cy	258,978	177,762	68.6%
Structural Steel	1 ton	35,328	12,133	34.3%
Piping (in buildings)	1,000 lf	893,261	134,458	15.1%
Piping (underground)	1,000 lf	126,594	95,156	75.2%
Conduit (in buildings)	1,000 lf	725,037	90,035	12.4%
Conduit (underground)	1,000 lf	192,860	177,780	92.2%
Cable Tray	1,000 lf	96,180	17,430	18.1%
Cable and Wire	1,000 lf	4,709,720	206,373	4.4%

Waste Treatment Plant Project - Percent Complete Status
Through September 2008

(Dollars - Millions)	Overall Facility Percent Complete			Design/Engineering			Construction		
Facilities	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete	Budget at Completion (BAC)	Budgeted Cost of Work Performed (BCWP)	% Complete
Low-Activity Waste	1,410.6	1,001.4	71%	124.0	117.2	95%	226.6	141.5	62%
Analytical Lab	549.5	236.3	43%	35.5	32.1	90%	62.5	32.7	52%
Balance of Facilities	900.1	464.0	52%	61.0	45.4	74%	173.4	110.8	64%
High-Level Waste	2,504.5	1,049.1	42%	196.9	168.1	85%	437.9	91.2	21%
Pretreatment	4,087.4	1,571.9	38%	328.0	218.7	67%	725.8	182.0	25%
Plant Wide/Gen Services	incld. above	incld. above	incld. above	622.5	444.5	71%	1,664.7	721.1	43%
Undistributed Budget	7.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	**9,460.0**	**4,322.7**	**46%**	**1,367.9**	**1,026.0**	**75%**	**3,290.9**	**1,279.3**	**39%**

Source: WTP Contract Performance Report

Sign In Sheet
Monthly Milestone Review Meeting
October 28, 2008

NAME	ORG	MSIN	PHONE
Becky Wiegman	PAC		373-9443
Janet Diediker	ORP		372-3043
Jeff Luke	WRPS		376-8429
Nancy Hazenbr	Ecology		372-7928
Jeanne Wallace	Ecology		372-7931
Mark Triplett	PNNL		376-1825
JOHN LONG	ORP		376-5416
Bob Lober	ORP		373-7949
C J Kemp	ORP		373-0649
Steve Pfaff	ORP		438-0417
Jeff Lyon	Ecy		534-1996
JOE CAGGIANO	ECOLOGY		372-7915
Mike Barnes	Ecology		372-7927
Ed Fredenburg	Ecology		372-7899
Fred Hudden	ORP		373-9393
Gary Olsen	ORP		438-4707
Tracy Gao	Ecology		372-7901
Brian Speer	Ecy		372-7985
Wahed Abdul	ORP		438-0455
Pete Furlong	ORP		438-0472